

Climate action (SDG 13)

SDG 13.2.1 Low-carbon energy tracking. Measure the amount of low carbon energy used across the university.

SDG 13.2.2 Total energy used

Description:

The ratio of renewable energy production divided by total energy usage per year:

In 2022 (the period from JUL-21 to JUN-22), onsite renewable energy generated is 101,200 KWH., while electricity consumption was 8,250,490 KWH. On the basis of the total energy consumption at Beni-Suef University, the proportion of renewable energy generation relative to energy consumption was 1.26 %

The amount of low-carbon energy used by BSU for a year in the period from JUL-21 to JUN-22 is 502,046 KWH , and all the low-carbon energy used was from solar energy and very small amount from small wind turbine at the Faculty of Engineering.



Example of solar lamp poles (Beni-Suef University -Faculty of Postgraduate Studies for Advanced Science, Beni-Suef)



Example of generating electricity from small solar panels (Beni-Suef University - Faculty of Engineering, Beni-Suef)



Example of 5 Kw Roof Panel (Beni-Suef University - Faculty of Postgraduate Studies for Advanced Sciences, Beni-Suef)



Example of miniature wind turbine (Beni-Suef University - Faculty of Engineering, Beni-Suef)

Climate action (SDG 13)

SDG 13.3.1 Local education programmes on climate

Does your university as a body provide local education programs or campaigns on climate change risks, impacts, mitigation, adaptation, impact reduction, and early warning?

Greenhouse gas is emitted during energy production and consumption and CO₂ is the most harmful gas to the environment. BSU has key implementation points to promote the reduction of carbon emissions that focus on management measures for power and water conservation, waste management, and environmental education, as follows;

1. Launching the Bicycle Festival at the main campus as well as the 320 acres complex campus and industrial complex campus in East Nile each academic year.

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=86795&cat_id=1

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=147403&cat_id=1

<https://www.elbalad.news/3060482>



2. Entering the private cars only three times a week helps reducing the gases emission to the environment by about an amount of up to two tons annually.



Reducing the number of days allowed for private cars to enter the campus

3. About 3200 trees of various types were planted at the university in 2021 -2022. Increasing the awareness with increasing the green space helps facing the climate changes and global warming.
https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=159802&cat_id=1
https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=73882&cat_id=1
<https://www.elwatannews.com/news/details/4496620>



4. Different articles and posters are always published on the official page of Beni-Suef University to help reduce the environmental pollution.



5. Increasing the awareness campaigns for rationalizing the consumption of the daily amount of water contributes to save the energy needed to pump that in turn will reduce greenhouse gas emission.

<https://gate.ahram.org.eg/News/3163694.aspx>

<https://www.elbalad.news/3192479>

https://www.bsu.edu.eg/News.aspx?NID=49313&cat_id=1

6. The university put strict instructions for smoking reduction such as; distribution of warning signs prohibiting smoking in the different university buildings and periodic following up of the behavior of students inside the buildings to prevent smoking.



7. Encouraging and providing funding for many projects that aim to reduce carbon dioxide emissions and global warming. For example;

- a) Using nanotechnology and plastic waste to produce renewable energy with the participation of a Solar Energy Technology and Fuel Production Company. The burning of plastic waste negatively affects the surrounding environment and public health, and the exploitation of these wastes in the production of economic fuel cells limits the harmful impact of waste and maximizes the use of it.



<https://pages.facebook.com/BSUUniv/photos/a.506431046034292/2791886260822081/?type=3&source=48>

- b) Winning of a number of research projects in the projects of young researchers - the fourth stage that contribute in CO₂ emission reduction;

https://www.bsu.edu.eg/Content.aspx?section_id=13062&cat_id=361

- c) Performing a project entitled ((Carbon sequestration by genetically modified microalgae for Biofuel production)). The project aims to develop an algae strain capable of fixing carbon dioxide with a higher efficiency. Cultivating these algae in highly polluted areas helps to reduce global warming.

<https://climateinarabic.com/%D8%A7%D8%AD%D8%AA%D8%AC%D8%A7%D8%B2-%D8%A7%D9%84%D9%83%D8%B1%D8%A8%D9%88%D9%86-%D8%A8%D9%88%D8%A7%D8%B3%D8%B7%D8%A9-%D8%A7%D9%84%D8%B7%D8%AD%D8%A7%D9%84%D8%A8-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%B1/>

<https://edu.see.news/2022/04/20/%D8%B9%D9%84%D9%88-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D8%B5%D9%86%D8%AF%D9%88%D9%82-%D8%B1%D8%B9%D8%A7%D9%8A%D8%A9-%D8%A7%D9%84%D9%85%D8%A8%D8%AA%D9%83%D8%B1%D9%8A%D9%86/>



Carbon sequestration by genetically modified microalgae for Biofuel production

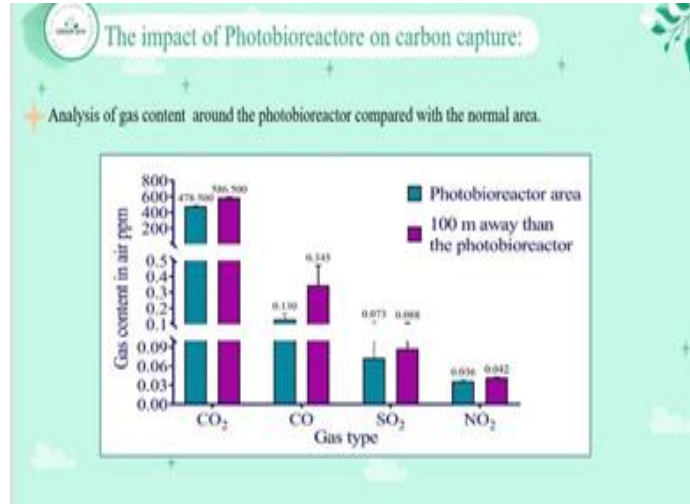



Photo bioreactor analysis

- d) Finishing and implementing of the funded research project entitled ((invention of a new catalyst for the economic CO₂ conversion into fuel). It is described by the below images;

Description of the project

Final Achievement Report


Project Final Achievement Report

Cover Sheet

Project ID: 25578

Call Name: Research support

Project Title: **Invention of a new catalyst for the economic CO₂ conversion into fuel**

Principal Investigator: Dr. Samaa Imam Mahmoud El-Dek

Affiliation: Faculty of Postgraduate Studies for Advanced Sciences, Beni-Suef University

Department: Materials Science and nanotechnology

Project period: From 1-2-2019 to 24-12-2020

Date of submission: 23-12-2020

Signature of Principal Investigator: S.I.El-Dek

Final Achievements Report

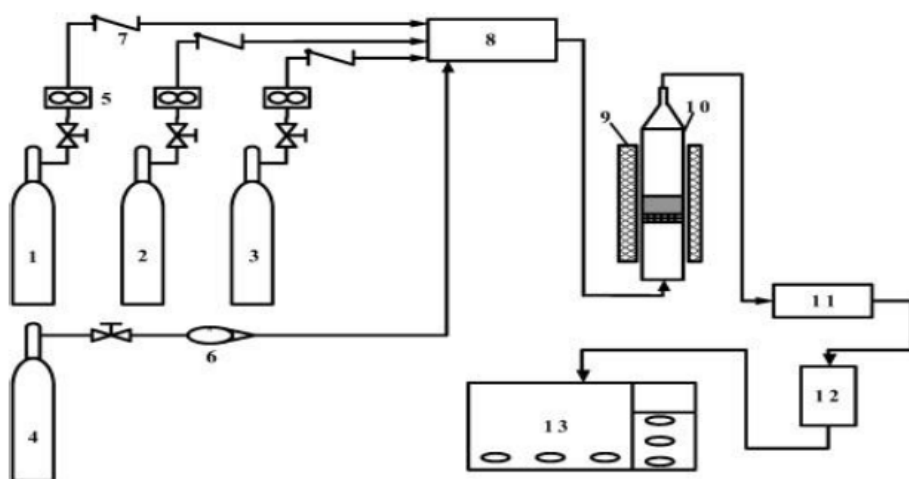
1. Project Abstract:

In our proposal, CO₂ mixed with water vapour in saturation state was discharged into a quartz reactor containing TiO₂ nanotube and illuminated by various UV lamps of different wavelengths for 48 h continuously. The gaseous products extracted were identified using gas chromatography. In order to improve the photo reduction of CO₂, nickel ions were incorporated in TiO₂ nanotube nano composites will be synthesized by hydrothermal method and used as photocatalyst instead of used pure TiO₂. This increase the efficiency of CO₂ conversion and it is low cost and abundant when compared to another Nobel metals. The carbon dioxide reduction system developed might well become of practical interest for photochemical fuel production, storage of solar energy and production of raw materials for the photochemical industry. Our objective is to develop a new cost-effective and environmentally friendly catalyst for CO₂ conversion to fuel by using simple photoreactor. It is expected that the synthesized photocatalyst will be efficient material for reduction of CO₂ in environment and also, conversion of CO₂ to fuel.

2. The achievements

2.1. Description of infrastructure project achievement (New lab, New Equipment, New service to your institution, etc.).

The best achievements here are the new cooperation channel, the new setup that is constructed. We get their experience in constructing the setup



A schematic diagram of atmospheric [fluidized bed](#) apparatus. 1—H₂; 2—CO; 3—N₂; 4—H₂/N₂; 5—mass flow meter; 6—rotor flow meter; 7—check valve; 8—mixer; 9—furnace, 10—Stainless steel reactor; 11—condenser; 12—Gas collector; 13—Gas Chromatography.

Final Achievement Report

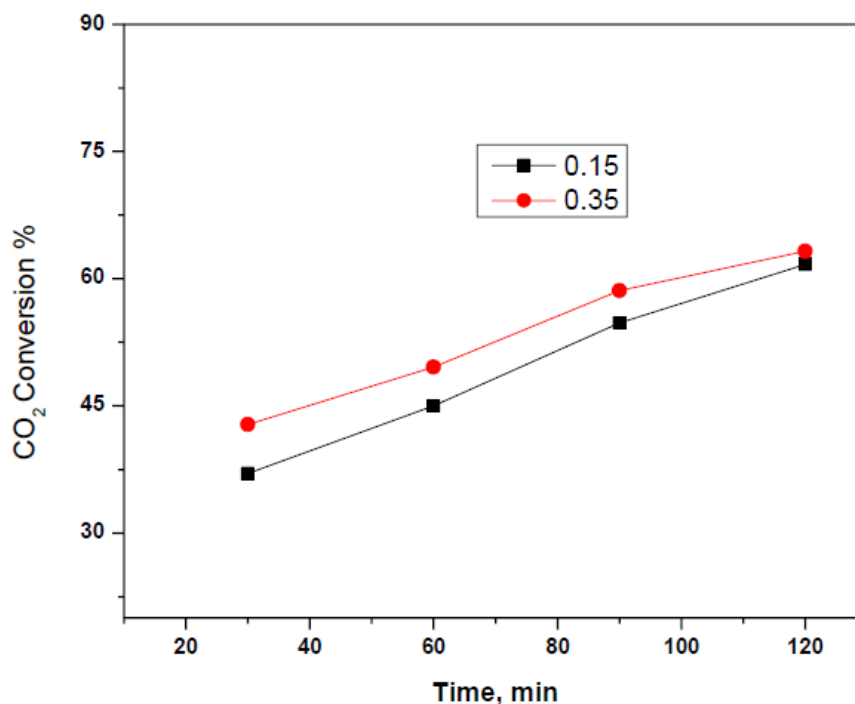
2.2. Description of the project scientific achievements:

- a. How your project was able to implement novel research strategy, despite operational excellence (should include the research methodology used, new methods (if any), results and findings with labeled diagrams, novel findings).

The project was able to facilitate the preparation of different types of nanomaterials (magnetic nanoparticles and titanate nanotubes).

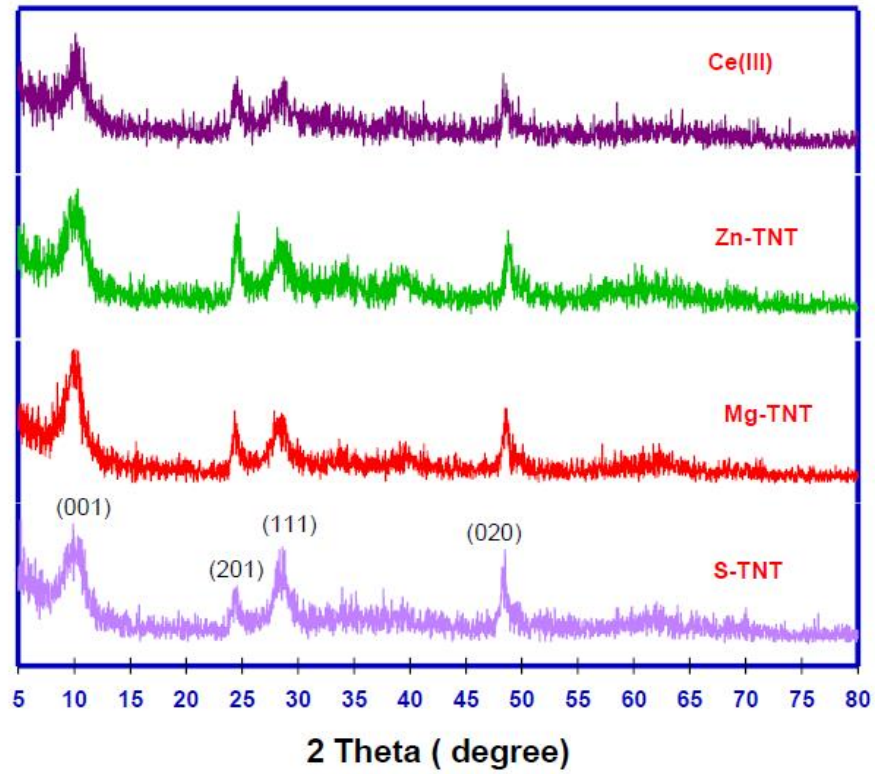
Hydrothermal technique is used to synthesize Titanates and another method (citrate nitrate) was used for preparing cobalt doped magnetite nanoparticles.

Efficiency of CO₂ reduction was computed from the measurements for all samples.

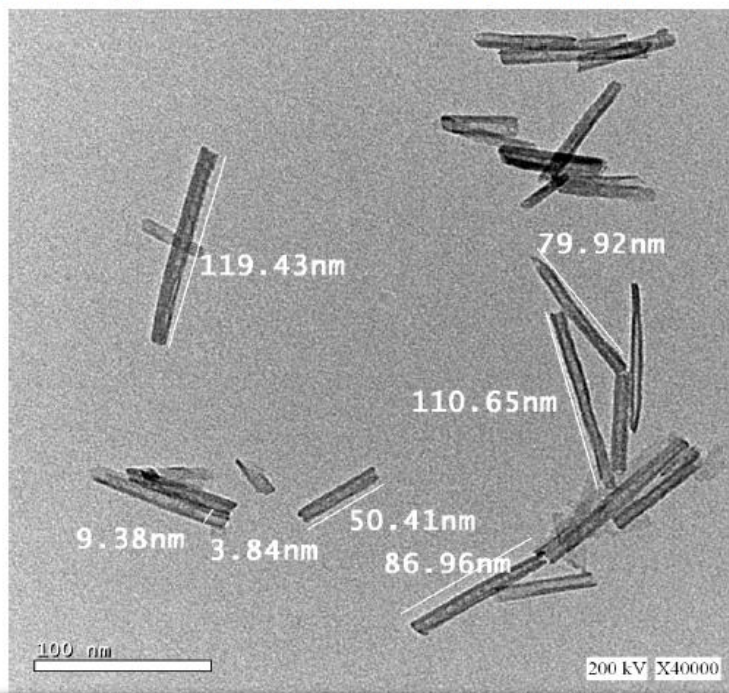


Co₂ conversion percentage versus time for the Co doped magnetite samples

Final Achievement Report



XRD patterns of pure and doped sodium titanate nanotubes



Final Achievement Report

For the titanates

<u>Sample</u>	<u>CO₂ conversion</u>	<u>CO selectivity</u>
<u>Ce doped titanate nanotubes</u>	<u>50%</u>	<u>12 %</u>
<u>Mg doped titanate nanotubes</u>	<u>18%</u>	<u>7.4 %</u>

The results are acceptable for both types of nanomaterials.

- b. How many publications resulted from the present project [manuscripts in preparations, published manuscripts, conferences abstracts (talks and posters)]
We are now writing two manuscripts concerning the results
- c. Please give a brief assessment of your external profile achievements. Describe the activities that demonstrate your achievement e.g. establishing training workshop, mentoring students, participation as speaker in conferences, networking (national and international)?
 We established a new cooperation with Egyptian Petroleum Research Institute (EPRI) that could be extended for further collaborations.
- d. How many students (provide names and degree) learned new techniques and were able to obtain their postgraduate degrees (MSc. or PhD. Theses) from your project?
 One master student (Eslam Fathi) learned the technique and awarded her master degree and currently many other students may profit from the experiments and tools in the laboratory
- e. How your project will provide support and expertise to academic and industry in Egypt (please describe giving examples)?
 A workshop including academics, researchers and stakeholders will be the post project activity as soon as possible.
 Stakeholders here will be cement companies at Beni-Suef
- f. How your project outcome will benefit the public sector and will be translated to serve national priority strategic plans in education, research and industry?
 The project outcomes are not only research articles to be published and awarding degrees, but also it helped in tackling the sustainable development goals through different dimensions. Mainly partnership (SDG17) , quality of education (SDG5), clean environment and green energy without toxic byproduct (SDG7). The ministry of environment as well as different industrial zones could profit from the large scale experiment
- g. Patent produced or can the project discovery be patented?
 In the future

Final Achievement Report

2.3. Development and Capacity building Achievements (skills, knowledge, etc)

- a. What are skills you gained from project management and building effective teams (describe in brief).
Dividing the work from literature survey, purchasing chemicals, setup, calibration, preparation of Nano catalysts. The best way to achieve results is the integrated work
- b. Your experience working with national and in international settings.
Collaboration with researchers in the EPRI
- c. Leadership you gained to conduct outstanding scientific research.

Conducting scientific research in such subject (nanomaterials served as catalyst for CO₂ reduction) is a very exciting experience to lead a teamwork in my department together with our peers at EPRI
- d. Mentoring experience and training of junior researches.
Training of junior scientist was successful and running always at our faculty for M.Sc. and Ph.D. students at the different laboratories
- e. Achievements of your project team.
Many publications concerning new nanomaterials, winning another large project (31305) centre of Excellence

3. Transferability of achievement

How your project achievement can be transferred to different organizations (academic, industrial, etc) and how STDF can facilitate that.

Workshops and training and engaging stakeholders from R&D of many companies if STDF could help in funding the activities, it will be very helpful

4. PI Self-Assessment:

Give a brief assessment of scientific experience and skills (management, collaboration, mentoring, teaching, networking, etc) you gained from the project

I learned too much from the report writing (technical) and financial.

Managing time lines of the activities.

Establishing a cooperation with partners in EPRI

Getting a new application of our nanomaterials

We wrote the project on the use of titanates , but also we worked on magnetite and it gave good results



8. There are many campaigns, initiatives, seminars, workshops and conferences that are frequently held at BSU aiming to raise the awareness about climate changes and how to combat them, for example;

Programs	Short Description
<p>The "Green Environment" initiative launched by Faculty of Postgraduate Studies for Advanced Sciences in cooperation with the Drinking Water and Sanitation Company, and a number of charitable institutions.</p> <p>https://www.bsu.edu.eg//News.aspx?NID=60336&cat_id=1</p>	<p>The initiative includes educating the outside community from villages, centers and cities affiliated with the governorate and schoolchildren through lectures and seminars to rationalize water and energy.</p>
<p>Holding of Climate Change Conference that is organized by Beni-Suef and Nile Universities.</p> <p>https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155915&cat_id=1</p>	<p>The most prominent recommendations of the conference are to continue supporting the implementation of presidential initiatives for various projects aimed at reducing the effects of climate change such as lining canals, a decent life project, desalination of sea water, the transition to drip irrigation, renewable energy projects such as the Benban project in Aswan, and materials recycling projects and the use of nano-fertilizers to reduce resource and energy consumption compared to conventional fertilizers that increase carbon emissions and pollute soil and water,</p>
<p>Holding a series of student seminars to raise awareness of the sustainable development goals with the participation of the Faculties of Mass Communication and developmental social work</p> <p>https://www.bsu.edu.eg/News.aspx?NID=104734&cat_id=1</p>	<p>They aim at quality education, achieving equal rights, inclusion, social justice, economic growth and productive employment, launching new cities and sustainable societies, combating climate change and its effects, and using all resources in a sustainable manner.</p>
<p>Many initiatives are launched by the participated faculties during the activities of the environmental week at BSU each academic year.</p> <p>https://ahlmasnews.com/828545</p>	<p>The Environmental Week for 2019-2020 witnessed ten initiatives including; the "Our Environment is the Beginning of Our Journey" initiative for the Faculty of Pharmacy, "Conserve Water...Save Energy" for the Faculty of Social Work, and "With Our Hands We Cultivate It" for the Faculty of Environmental Agriculture.</p>
<p>Inauguration of a family within the student union of Beni-Suef University under the name of "Environmental Protection Family" with the generalization of this name to the rest of the university's faculties and institutes.</p> <p>https://www.shorouknews.com/news/view.aspx?cdate=30122019&id=36c467d7-79a1-4175-aba6-c0916629b697</p>	<p>The family's work and activities are through the University's Center for the Development of Means of Preserving the Environment.</p>



<p>A workshop within the activities of the "Clean Energy Storage Devices" project</p> <p>https://www.bsu.edu.eg/News.aspx?NID=146358&cat_id=1</p>	<p>Faculty of Postgraduate Studies for Advanced Sciences organized a workshop within the activities of the "ENERGY STORAGE DEVICES: CHALLENGES AND PERSPECTIVES" project funded by the Science and Technology Fund.</p>
<p>The Conference of "Waste to Energy"</p> <p>https://www.bsu.edu.eg/News.aspx?NID=53078&cat_id=1</p>	<p>The themes of the conference revolve around how to benefit from waste and convert it into energy. That includes food waste and how to convert it into energy, the feasibility of using alternative fuels in the cement industry, waste management and sustainability and carbon electrodes derived from waste for energy storage systems. The conference also dealt with a review of the most important Modern means and technology used in this field.</p>
<p>Awareness campaigns for students to plant rooftops</p> <p>https://www.elbalad.news/4414088</p> <p>https://www.bsu.edu.eg/News.aspx?NID=104680&cat_id=1</p>	<p>Launching the rooftop cultivation initiative among university students during the summer vacation in an attempt to spread the culture of agriculture in general and rooftop cultivation in particular, in cooperation between the Faculty of Agriculture and one of the environmental services companies.</p>
<p>The university's plan to educate students to rationalize water consumption, during the University Council No. 155.</p> <p>https://www.elbalad.news/3192479</p>	<p>Awareness of rationalizing water consumption among young people, explaining that the plan includes holding workshops, educational seminars and lectures on how to conserve water.</p>
<p>Conference of the Faculty of Postgraduate Studies for Advanced Sciences entitled "The Fifth International Conference on Advanced Sciences (ICASS). 9-12 November 2019 Hurgada, Egypt"</p> <p>https://www.shorouknews.com/news/view.aspx?cdate=1112019&id=d0931a3a-5f0d-4c3f-9851-a83bb78c2435</p>	<p>in cooperation with Misr International University and Prais Sud University in France, in the presence of a group of scholars and researchers from various Egyptian universities. European and Arabic. The activities of the International Conference on Advanced Sciences discussed the use of nanometric applications in water purification and desalination, energy storage, and in the treatment of cancer diseases.</p>
<p>Holding a workshop entitled "Recent advances in Renewable Energy technologies IV"</p> <p>https://www.facebook.com/advancedsciences/posts/1912098568902141</p>	<p>It is an example of the annual workshops in the renewable energy field at Faculty of Postgraduate Studies for Advanced Sciences</p>
<p>Different faculties launched an initiative for afforestation. For example, that of Faculty of Special Needs Sciences in preparation for the new academic year, in cooperation with the</p>	<p>The initiative is important in encouraging members of the university community to pay attention to the culture of afforestation, which is one of the important behaviors that bear an</p>



<p>Department of People with Disabilities Affairs in the governorate.</p> <p>The Faculty of Agriculture launched the initiative to afforestation of the campus in a complex of 300 acres.</p> <p>https://www.eldyar.net/213841</p> <p>https://www.youm7.com/story/2020/6/29/%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B7%D9%84%D9%82-%D9%85%D8%A8%D8%A7%D8%AF%D8%B1%D8%A9-%D8%AA%D8%B4%D8%AC%D9%8A%D8%B1-%D8%AD%D8%B1%D9%85-%D8%A7%D9%84%D9%83%D9%84%D9%8A%D8%A9-%D8%A8%D9%85%D8%AC%D9%85%D8%B9-300/4851295</p>	<p>environmental and aesthetic return for the community.</p>
<p>Participation of the Center for the Development of Means of Preserving the Environment at BSU in the “We Are All One” initiative</p> <p>https://edu.see.news/new/2020/09/22/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/</p>	<p>The initiative aims to raise awareness not to throw waste, and to dispose of used masks in a safe manner, by making awareness posters and distributing them to all railway stations with the participation of the Ministry of Transport, in addition to recycling agricultural waste for use with the participation of the Egyptian Agricultural Bank and the Directorate of Veterinary Medicine.</p>
<p>Participation of Beni-Suef University in the National Committee for Sustainable Development and Governance</p> <p>https://www.elbalad.news/4810693</p>	<p>This participation allows the Academy of Scientific and Technological Research in Egypt to provide the university with the necessary financial and technical support. Hence, Beni-Suef University can participate in global research projects and improve ranking of the university among different universities in the field of sustainable development</p>
<p>The university won the first place at the level of Egyptian universities in the Sustainable Development Forum competition in designing an initiative model to protect the environment</p> <p>https://www.bsu.edu.eg/News.aspx?NID=52963&cat_id=1</p>	<p>This initiative was with the participation of Beni-Suef University with different organizations interested in environmental affairs and 18 Egyptian universities.</p>

<p>“Save and Preserve Your Country” initiative</p> <p>https://www.shorouknews.com/news/view.aspx?cdate=2032017&id=84155a0e-35d8-4024-8584-7bf85ee547e0</p>	<p>It aims to instill the concepts of conservation of electricity and water energy, spread awareness of energy consumption, and how to rationalize by changing the patterns and habits of daily consumption, and to provide practical solutions for rationalization.</p>
<p>The “Be Prepared for Green” campaign, in cooperation with the Waste Management Regulatory Agency of the Ministry of Environment for university youth.</p> <p>https://gate.ahram.org.eg/News/2942904.aspx</p>	<p>E-waste has become an environmental problem in light of technological progress and youth modernization of the devices they own and the accumulation of old and invalid devices in their homes or disposal in a non-environmental way. And dispose of the rest of the components of the device by burning or dumping them in landfills. Hence. It is important to Introduce university youth to this important issue and train them on the safe disposal of electronic waste.</p>

9. The participation of students in competitive master’s scholarships from the Center of Excellence for Water in cooperation with the American University in Egypt.

- <https://www.almasryalyoum.com/news/details/2407801>
- <https://www.facebook.com/egyptcoewater/posts/406066994067902>
- https://www.bsu.edu.eg/News.aspx?NID=86718&cat_id=1&fbclid=IwAR2i3qZcCALJWmlu#
- https://www.bsu.edu.eg/News.aspx?NID=150952&cat_id=1
- https://bsu.edu.eg/SingleNews.aspx?NID=152109&cat_id=1#:~:text=%D8%A7%D9%84%D8%B9%D8%A7%D9%85%D8%A9%20%D9%84%D9%84%D9%85%D8%B4%D8%B1%D9%88%D8%B9%D8%A7%D8%AA%20%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%8A%D8%A9,%D8%AC%D8%A7%D9%85%D8%B9%D8%A9%20%D8%A8%D9%86%D9%8A%20%D8%B3%D9%88%D9%8A%D9%81%20%D8%AA%D8%AA%D8%B5%D8%AF%D
- <https://www.egyptcoewater.eg/sustainability/>
- <https://wrc.wsu.edu/organization/beni-suef-university/>

10. Faculty of Postgraduate studies for Advanced Sciences is characterized by the presence of a strong infrastructure of integrated devices and laboratories and it has different innovative programs and plans concerning renewable energy as shown:

- a) The faculty includes a Department of Renewable Energy Science and Engineering, which is the first of its kind to integrate energy sciences, is concerned with manufacturing materials used in energy storage and conversion with engineering manufacturing of energy tools from solar energy, batteries and fuel cells, to contribute to alternative solutions for electricity and fuel.
- b) It has a central lab for thin film protection used in solar cell applications. The current generated can be used to power various appliances or it can be stored in batteries to be used when required.

- <https://www.facebook.com/advancedsciences/videos/437018341678633/>
- https://www.psas.bsu.edu.eg/ContentSide.aspx?section_id=11742&cat_id=18
- https://www.psas.bsu.edu.eg/Content.aspx?section_id=5780&cat_id=18

c) Cement manufacture contributes greenhouse gases and cement sector is the third largest industrial source of pollution, emitting more than 500,000 tons per year of greenhouse gases. Hence, the Faculty of Postgraduate studies for Advanced Sciences offers cement chemistry and technology program as a distinct and unique program that is the only one in Egyptian universities. This program aims to improve cement characters and to put different pathways for low-carbon cement production.



Cement chemistry and technology lab

d) Environmental and Energy Department is concerned with giving many master's and doctorate degrees as well as diplomas in more than 10 programs specialized in fields of energy, environment , climate change, cement chemistry and technology and quality control. From 2014 to 2022. a large number degrees was registered and awarded as displayed by the attached figure:

https://www.psas.bsu.edu.eg/ContentSide.aspx?section_id=696&cat_id=18&fbclid=IwAR3jEC1bRloL Iid4ib9grBZl9iYVCtiqCyINUfFDQ0gN3hnJW1HnP92uj8

Number of registered and awarded degrees (M.Sc., Ph.D. and diplomas)

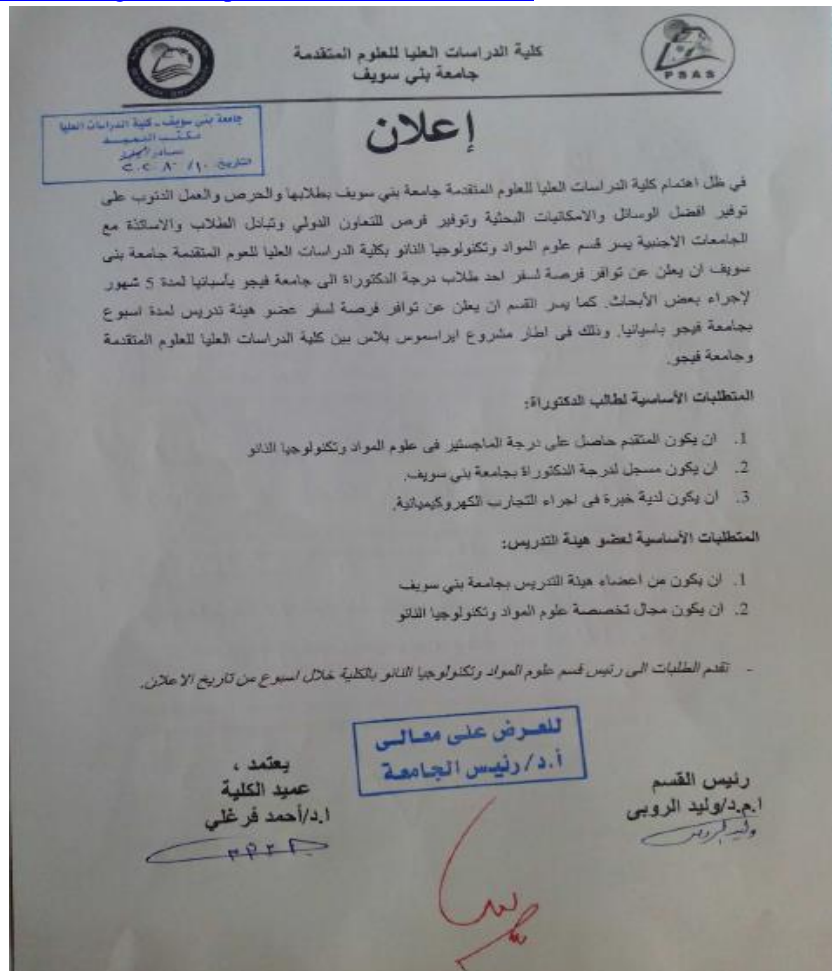
year	M.Sc.R	M.Sc. A	Ph.D.R	Ph.D.A	Diplome R	DiplomeA
2014	2	0	6	0	65	51
2015	38	0	17	0	88	67
2016	39	1	7	1	130	80
2017	27	7	9	2	181	120
2018	44	9	9	2	360	262
2019	28	16	10	5	466	364
2020	36	10	8	2	853	637
2021	49	19	10	4	119	286
2022	32	22	8	5	221	210
total	295	84	84	21	2483	2077

11. Getting an Egyptian-French research project entitled “Nanometric Compounds of Pure and Grafted perovskite and Their Use in Energy Applications.” The project falls under the Imhotep protocol between the Academy of Scientific Research and Campus France, and the project includes the preparation of some nanometric materials and their use in fuel cells to produce energy. The project includes visits exchanged between the research team of the project from the Egyptian side and the principal researcher, Dr. Pierre Mellet, professor at the University of Paris-South in France.

https://www.bsuef.edu.eg/News.aspx?NID=104169&cat_id=1&fbclid=IwAR2vpXEWP6UjiiwyeCE3-w1vx0Ylbk4kFTUJ20vALQzdHMs-KEzDVzPfknc

12. International cooperation and exchange agreements of Beni-Suef University with French, Spanish and Japanese Universities. Where, some students traveled to the Spanish University of Vigo and University of Jaen to study solar energy.

https://www.psas.bsuef.edu.eg/News.aspx?NID=146774&cat_id=18



Announcing of opportunities for international cooperation and the exchange of students and professors with foreign universities



13. Scientific cooperation programs between Egypt and Italy under the auspices of the Science, Technology and Innovation Funding Authority in fields of renewable energy, materials science and engineering and environmental sciences.

https://www.bsu.edu.eg/News.aspx?NID=156044&cat_id=361

14. A protocol of cooperation with the universities of Toliara in Madagascar and Dakar in Senegal in the scientific fields, and the expansion of the establishment of new programs in various projects and activities. It aims to;

- Engineering consultancy services in the fields of renewable energy and water.
- Enhance cooperation in fields of education and scientific research, academic programs and degrees
- Organizing joint conferences, seminars and workshops,
- Integrating laboratories between the two universities
- Engineering consultancy services in the fields of renewable energy and water.

<https://www.elwatannews.com/news/details/5258570>

Climate action (SDG 13)

SDG13.3.2 Climate Action Plan, shared

Does your university as a body have university climate action plan shared with local government and / or local community group

- I. BSU implements relative activities to increase awareness of the importance of clean energy and water saving and of reducing carbon dioxide emissions in the local community, for example;
1. The lighting of Beni-Suef University in green celebrating with the World Earth Day from seven to nine in the evening and for three days (20 to 22 April, each year). It aims to spread awareness and concern for the environment. A number of instructional videos and documentaries have been published on the university's official page to raise the awareness of the local community and the students of the environment, the dangers of pollution, and how to save energy and preserve the climate.

https://www.bsu.edu.eg/News.aspx?NID=154228&cat_id=1

<https://fb.watch/foNGXWzu4I/>



2. Launching the “Save and Preserve Your Country” initiative. It aims to instill the concepts of conservation of electricity and water energy, spread awareness of energy consumption, and how to rationalize by changing the patterns and habits of daily consumption, and to provide practical solutions for rationalization. Also, it aims to instill in the consumer the conviction of the necessity of rationalization in the interest of the public interest and the security of the national economy. The initiative included many events and activities that serve the environment and society, whether inside or outside the university, including seminars to raise awareness of the conservation of electricity and water.

<https://www.shorouknews.com/news/view.aspx?cdate=22032017&id=84155a0e-35d8-4024-8584-7bf85ee547e0>



3. The launching of the "Green Environment" initiative, by Faculty of Postgraduate Studies for Advanced Science in cooperation with the Drinking Water and Sanitation Company, and a number of charitable institutions. The initiative includes educating the outside community from villages, centers and cities affiliated with the governorate and schoolchildren through lectures and seminars in a simple and easy way on how to rationalize water and energy, about environmental toxins surrounding students and how to prevent them, and Hepatitis C

https://www.bsu.edu.eg/News.aspx?NID=60336&cat_id=1



4. The Fourth International Conference "The Risks of Environmental Pollution in Developing Countries", held its first session at the University of Beni-Suef involved scientific sessions on various initiatives, including prepare for green, our bag is paper and our package is glass, with field visits to the Angel Eight factory in the industrial zone. Several international and regional universities, participated and the goals of the conference revolve around environmental pollution, environmental risk management, modern technologies for environmental monitoring, protection of water resources, wastewater management, water quality, the impact of environmental pollution on food security, renewable energy, sustainable development, waste management, green chemistry, climate change and environmental risks.

https://www.bsu.edu.eg/News.aspx?NID=104875&cat_id=5



5. Holding of Climate Change Conference that is organized by Beni-Suef and Nile Universities. The most prominent recommendations of the conference are to continue supporting the implementation of presidential initiatives for various projects aimed at reducing the effects of climate change such as lining canals, a decent life project, desalination of sea water, the transition to drip irrigation, renewable energy projects such as the Benban project in Aswan, and materials recycling projects and the use of nano-fertilizers to reduce resource and energy consumption compared to conventional fertilizers that increase carbon emissions and pollute soil and water,

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155915&cat_id=1

6. Inaugurating the Egyptian Public Universities Activities and Events Forum to Confront Climate Changes. The forum has goals at the regional level, most notably the importance of regional integration between public universities in preserving the environment and achieving sustainable development, as well as national goals represented in supporting and developing scientific research in applied projects related to climate change, managing new and renewable energy, and developing research in the field of water purification and water treatment. Drainage and beach protection.

<https://www.albawabhnews.com/4656766>



7. The “We Are All One” and “Get ready for the green” initiatives aim to raise awareness not to throw waste, and to dispose of used masks in a safe manner, by making awareness posters and distributing them to all railway stations with the participation of the Ministry of Transport, in addition to recycling agricultural waste for use with the participation of the Egyptian Agricultural Bank and the Directorate of Veterinary Medicine.

<https://edu.see.news/new/2020/09/22/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>
<https://www.elwatannews.com/news/details/4316926>
<https://www.elbalad.news/4414088>

8. An awareness convoy at the Faculty of Earth Sciences to the village of Ashmant within the initiative of a decent life included educating the people of the village in the field of water pollution, sewage networks, water desalination, water problems, dealing with waste and the best way to maintain clean drinking water.

https://www.bsu.edu.eg/News.aspx?NID=151275&cat_id=50

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>



9. Holding of Climate Change Conference that is organized by Beni-Suef and Nile Universities. The most prominent recommendations of the conference are to continue supporting the implementation of presidential initiatives for various projects aimed at reducing the effects of climate change such as lining canals, a decent life project, desalination of sea water, the transition to drip irrigation, renewable energy projects such as the Benban project in Aswan, and materials recycling projects and the use of nano-fertilizers to reduce resource and energy consumption compared to conventional fertilizers that increase carbon emissions and pollute soil and water,

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155915&cat_id=1

10. Holding a series of student seminars to raise awareness of the sustainable development goals with the participation of the Faculties of Mass Communication and developmental social work. They aim at quality education, achieving equal rights, inclusion, social justice, economic growth and productive employment, launching new cities and sustainable societies, combating climate change and its effects, and using all resources in a sustainable manner.

https://www.bsu.edu.eg/News.aspx?NID=104734&cat_id=1

11. Many comprehensive convoys for some villages in Beni-Suef Governorate, which included;

- Awareness seminars for the villages' students about ways to rationalize water consumption
- Taking samples of drinking water to conduct the necessary analyzes in the university laboratories, to ensure the safety of water and its compliance with the standards for drinking water.

<https://www.elwatannews.com/news/details/3834204>

https://www.bsu.edu.eg/News.aspx?NID=151411&cat_id=1

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>

<https://www.youm7.com/story/2021/9/21/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D9%8A%D9%82%D9%88%D8%AF-%D9%82%D8%A7%D9%81%D9%84%D8%A9-%D9%84%D9%82%D8%B1%D9%8A%D8%A9-%D8%A3%D8%B4%D9%85%D9%86%D8%AA-%D8%B6%D9%85%D9%86-%D8%AD%D9%8A%D8%A7%D8%A9/5468949>



برعاية **أ.د/ منصور حسن** رئيس الجامعة المستشار/ **هاني عبد الجابر** محافظ بني سويف

واشراف/ **أ.د/ هشام بشري محمود** نائب رئيس الجامعة



تنظم جامعة بني سويف (القافلة الشاملة لقرية أبو ياط - مركز الواسطي)

لجميع التخصصات (طب بشري/ طب بيطري/ حملات توعية)

الكلية المشاركة (الطب البشري - الطب البيطري - العلوم - الآداب - الخدمة الإجتماعية - العلاج الطبيعي - التمريض)

وذلك يوم الاثنين الموافق ٢٩ أكتوبر ٢٠١٨م

The comprehensive convoy of Beni-Suef University for the Abu Yat village, El Wasta Center



The comprehensive convoy of Beni-Suef University for the villages of Suds and Harbishnet as part of a "decent life"

12. Holding a seminar on energy conservation and its types in the surrounding community by Faculty of Developmental Social Work. It aimed to raise awareness of the students of the primary E-Montazaha School with the different means of energy saving in both home and school.

https://www.bsu.edu.eg/Backend/Uploads/PDF/SDG/SDG/University%20Report%202019_compressed.pdf



- II. Center for the Development of Means of Preserving the Environment at BSU aims to identify environmental problems in the province and work to solve them in a scientific manner to reduce them. It also establishes close cooperation with advisory offices, governmental and industrial bodies, and community and scientific institutions, to solve environmental problems and provide specialized technical advice. In addition, it actively contributes to the development and implementation of policies, whether at the governorate or national level.

<https://www.elwatannews.com/news/details/4316926>

<https://www.elbalad.news/4414088>

<https://www.elwatannews.com/news/details/4316926?t=mpush>

- III. A joint cooperation protocol between the Beni-Suef University and the Ministry of Environment. It aims to; a) participate in achieving sustainable development, b)/ directing scientific research and linking it to environmental issues, and C) contributing with the ministry to the success of all projects and solving environmental problems such as waste recycling and power generation.

https://www.bsu.edu.eg/Content.aspx?side_id=60&cat_id=1



- IV. The Excellence Center for the economic production of approved nanometric materials aims to establish a small certified factory to produce specific and approved nanometric materials needed by society and by industry, to be an example of linking research with industry. Nanometric materials can be used in fields of clean energy storage, safe and highly efficient energy devices and water management and treatment. The center project is funded from the Science and Technology Development Fund at the Academy of Scientific Research. The Science and Technology Development Fund participates in setting some items in it to ensure the achievement of the project objectives,

<https://www.shorouknews.com/news/view.aspx?cdate=25022019&id=03d06323-2a6e-48fe-816b-c28d0c4325e7>

- V. The Central Laboratory and Environment and Water Lab at Faculty of Postgraduate Studies for Advanced Science

It contains many devices and tools necessary to conduct analyzes and measurements of water pollutants, and analyzes for different companies and factories inside and outside Beni-Suef Governorate. It helps in making decisions and recommendations necessary to solve many environmental problems related to water pollution and its negative impact on the health of the citizen, which consequently affects the national economy.

<https://www.almasryalyoum.com/news/details/1334930>

<https://www.facebook.com/Central.Lab.AdvancedScience>

https://www.bsu.edu.eg/Content.aspx?section_id=5739&cat_id=18



VI. The Water Studies and Research Center at Faculty of Earth Science.

1. It is one of the specialized centers at the level of Egyptian universities in conducting all studies related to the sustainable management of water resources (conventional and Unconventional, renewable and non-renewable) in terms of exploration, evaluation and purification and treatment and reuse as well as desalination, control and quality assurance for all Processes. Where it is concerned with the following strategic goals;
 - a) Designing and implementing treatment units for all types of sewage, agricultural and industrial water.
 - b) Conducting studies for the establishment and rehabilitation of wastewater treatment plants Existing stations and raising their efficiency
 - c) Conducting studies for the establishment and rehabilitation of existing wastewater treatment plants and raising their efficiency
 - d) Water desalination (sea water and ground water)
 - e) Purification of surface and ground water
2. The center has carried out many studies and research related to community service, the most important of which are:
 - a) Designing an industrial sewage treatment unit for the Pharaohs Cardboard Factory - Kom Oshim area in Fayoum.
 - b) Rehabilitation of the industrial wastewater treatment unit of the Horus Paper Factory in the industrial zone of Bayad Al Arab in Beni-Suef to reuse wastewater and not waste it.
 - c) The current evaluation of several sewage treatment plants in Beni-Suef, such as the Kom Abu Radi plant, the new Beni-Suef plant and the Bayad Al Arab plant.
 - d) Making the necessary environmental measurements for many factories in Beni-Suef, such as Horus Paper Factory, Egypt Cables Company, Chemical Fertilizers Company, and others.
 - e) Making an integrated environmental record for the University (making environmental measurements for the various faculties of BSU from classrooms, student laboratories, research laboratories, service units,) and providing recommendations and proposals with periodic follow-up every 6 months so that the University of Beni-Suef is a university Environmentally friendly.
 - f) Making a plan to educate citizens on how to rationalize the consumption of water resources and make good use of them, provided that the university members implement this plan during the summer vacation in some villages of Beni-Suef Governorate.
 - g) Conducting studies for several land reclamation companies for the purpose of exploring and evaluating groundwater in the desert hinterland of Beni-Suef Governorate.
 - h) Preparing an integrated project to explore and evaluate the presence of groundwater in the desert hinterland of Beni-Suef Governorate for the purpose of horizontal expansion of the governorate and the creation of new urban communities with usable water sources.

<https://www.facebook.com/BSUintoffice/posts/3757377684276585/>

<https://www.earthsc.bsu.edu.eg/Backend/Uploads/PDF/%D9%85%D8%B7%D9%88%D9%8A%D9%87%20%D8%A7%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D9%85%D8%AD%D9%88%D9%84.pdf>

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155769&cat_id=1

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155373&cat_id=1

https://www.bsu.edu.eg/News.aspx?NID=96324&cat_id=1

https://www.bsu.edu.eg/News.aspx?NID=151395&cat_id=1

https://www.bsu.edu.eg/Sector_Home.aspx?cat_id=382

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D9%87%D9%8A%D9%83%D9%84-%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>
<https://akheralasbo3.com/96647.html>
https://www.coenano.bsu.edu.eg/News.aspx?NID=151999&cat_id=372
<https://shbabbek.com/show/147550>



The Water Studies and Research Center at Faculty of Earth Science

Climate action (SDG 13)

SDG13.3.3 Co-operative planning for climate change disasters

Does your university as a body participate in cooperative planning for climate change that may include the displacement of people both within a country and across borders, working with government?

1. A joint cooperation protocol between the Beni-Suef University and the Ministry of Environment. It aims to; a) participate in achieving sustainable development, b)/ directing scientific research and linking it to environmental issues, and C) contributing with the ministry to the success of all projects and solving environmental problems such as waste recycling and power generation.

https://www.bsu.edu.eg/Content.aspx?side_id=60&cat_id=1



2. The Central Laboratory and Environment and Water Lab at Faculty of Postgraduate Studies for Advanced Sciences

It contains many devices and tools necessary to conduct analyzes and measurements of water pollutants, and analyzes for different companies and factories inside and outside Beni-Suef Governorate. It helps in making decisions and recommendations necessary to solve many environmental problems related to water pollution and its negative impact on the health of the citizen, which consequently affects the national economy.

<https://www.almasryalyoum.com/news/details/1334930>

<https://www.facebook.com/Central.Lab.AdvancedScience>

https://www.bsu.edu.eg/Content.aspx?section_id=5739&cat_id=18



3. The Water Studies and Research Center at Faculty of Earth Science.

It is one of the specialized centers at the level of Egyptian universities in conducting all studies related to the sustainable management of water resources (conventional and Unconventional, renewable and non-renewable) in terms of exploration, evaluation and purification and treatment and reuse as well as desalination, control and quality assurance for all Processes. Where it is concerned with the following strategic goals;

- a) Conducting studies on rising groundwater levels and their negative effects on the surrounding environment and infrastructure, as well as the quality of agricultural soil.
- b) The evaluation of several sewage treatment plants in Beni-Suef, Governorate.
- c) Making the necessary environmental measurements for many factories in Beni-Suef Governorate.
- d) Making an integrated environmental record for the University (making environmental measurements for the various faculties of BSU from classrooms, student laboratories, research laboratories, service units) and providing recommendations and proposals with periodic follow-up every 6 months.
- e) Make a plan to educate citizens on how to rationalize the consumption of water resources and make good use of them, provided that the university members implement this plan during the summer vacation in some villages of Beni-Suef Governorate.

<https://www.facebook.com/BSUintoffice/posts/3757377684276585/>

<https://www.earthsc.bsu.edu.eg/Backend/Uploads/PDF/%D9%85%D8%B7%D9%88%D9%8A%D9%87%20%D8%A7%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D9%85%D8%AD%D9%88%D9%84.pdf>

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155769&cat_id=1

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155373&cat_id=1

https://www.bsu.edu.eg/News.aspx?NID=96324&cat_id=1

https://www.bsu.edu.eg/News.aspx?NID=151395&cat_id=1

https://www.bsu.edu.eg/Sector_Home.aspx?cat_id=382

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D9%87%D9%8A%D9%83%D9%84-%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://akheralasbo3.com/96647.html>

https://www.coenano.bsu.edu.eg/News.aspx?NID=151999&cat_id=372

<https://shbabbek.com/show/147550>



The Water Studies and Research Center at Faculty of Earth Science



جامعة بني سويف - كلية علوم الأرض
مركز الدراسات وبحوث المياه



كلية التعليم الصناعي

فيما يلي التقرير الفني لبعض القياسات البيئية التي أجريت لبعض النقاط داخل الكلية يوم الثلاثاء الموافق 2021/5/4 بمعرفة مركز الدراسات وبحوث المياه بكلية علوم الأرض جامعة بني سويف.

أولاً: قياسات الغازات

H2S mg/m3	VOC mg/m3	NO2 mg/m3	SO2 mg/m3	CO mg/m3	• خطه القياس
0.00	2.10	0.02	0.00	3.22	ورشة الخراطة
0.00	3.11	0.55	0.00	1.96	ورشة اللحام
0.00	0.02	0.35	0.00	1.33	ورشة الخراطة
-	-	150	150	10 ²¹	(1)

(1) المواصفة القياسية المصرية لقيمة الحد الأقصى لحدوث الهواء المحيط على النحو المنصوص عليه في القانون 1994/4 وتعديله (قانون 2009/9).

(2) متوسط 8 ساعات

ثانياً: قياسات المواد الغريبة

PM ₁₀ µg/m3	امتكن القياس
0.644	ورشة الخراطة
0.681	ورشة اللحام
0.635	ورشة الخراطة
150	(1)

(1) المواصفة القياسية المصرية لقيمة حد الأقصى لحدوث الهواء المحيط على النحو المنصوص عليه في القانون 1994/4 وتعديله (قانون 2009/9).



جامعة بني سويف - كلية علوم الأرض
مركز الدراسات وبحوث المياه



Environmental measurements البيئة

Heat stress [°C]	Illumination intensity (lux)	Noisy (db)	امتنان القياس
33	480	88	ورشة الخراطة
33	380	73	ورشة اللحام
34	184	65	ورشة الخراطة
		98	(1)

الملاحظات والتوصيات:

شدة الإضاءة تحتاج تعديل في ورشة الخراطة لتقليل التلوث البصري.
سجلت شدة الصوت في جميعها أقل من الحد الأقصى المسموح به لتلوث الوحدة (8 ساعات) وهو (90) سجلت لم شدة الإضاءة فيما تبقى الورشة نظيفة أثناء العمل لتقليل الأثر.
سجلت لم درجات الحرارة مقارنة
معظم الورش في مكان واحد واسع يضمه الكهرباء والشبكات المتولدة، صفوه مقارنة بغيره المكان.
الورش لا يوجد بها عزل ولا دولاب، ولذلك في لوحت يجتذب في كل مكان.
المكان بحاجة منه للوقاية إضافة على كل الأجهزة والوحدات الكهربائية ومسار الخروج أو لتعريب.
الوسائل الكهربائية تحتاج ازمدة لتحقيق السلامة الصحيح.

وتفضلوا بقبول فائق الاحترام

د/ محمد عبدالوهاب عثمان

مدير مركز الدراسات وبحوث المياه

أ.د/ علي قريش سليم

رئيس مجلس إدارة مركز الدراسات وبحوث المياه



An example of making an integrated environmental record and recommendations and proposals with periodic follow-up for Faculty of Engineering at BSU

4. The participation of Beni-Suef University in the National Committee for Sustainable Development and Governance that is financially and technically funded by Academy of Scientific Research and Technology. The most important objectives and outputs of the committee, are the establishment of a center for sustainable development and governance in all Egyptian universities to ensure the sustainability of the committee's work, as well as cooperation with industrial bodies and strengthening community participation through the committee.

<https://www.elbalad.news/4810693>



The participation of Beni-Suef University in the National Committee for Sustainable Development and Governance

5. Center for the Development of Means of Preserving the Environment at BSU aims to identify environmental problems in the province and work to solve them in a scientific manner to reduce them. It also establishes close cooperation with advisory offices, governmental and industrial bodies, and community and scientific institutions, to solve environmental problems and provide specialized technical advice. In addition, it actively contributes to the development and implementation of policies, whether at the governorate or national level.

<https://www.elbalad.news/4414088>

<https://gate.ahram.org.eg/News/2942904.aspx>

<https://www.elwatannews.com/news/details/4316926?t=mpush>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D8%A7%D8%B7%D9%84%D8%A7%D9%82-%D9%85%D8%A8%D8%A7%D8%AF%D8%B1%D8%A9-%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A7%D9%84%D8%A3%D8%B3%D8%B7%D8%AD-%D8%A8%D9%8A%D9%86-%D8%B7%D9%84%D8%A7%D8%A8-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D8%A9/4886687>
<https://edu.see.news/new/2020/09/22/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

6. Organizing scientific conferences and providing funding for different research projects that for aim to evaluating the effects of climate change and providing solutions

https://www.bsu.edu.eg/Content.aspx?section_id=13062&cat_id=361
https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155915&cat_id=1
https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=156557&cat_id=1
https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=156557&cat_id=1
<https://climateinarabic.com/%D8%A7%D8%AD%D8%AA%D8%AC%D8%A7%D8%B2-%D8%A7%D9%84%D9%83%D8%B1%D8%A8%D9%88%D9%86-%D8%A8%D9%88%D8%A7%D8%B3%D8%B7%D8%A9-%D8%A7%D9%84%D8%B7%D8%AD%D8%A7%D9%84%D8%A8-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%B1/>
<https://www.elbalad.news/5478443>

7. The implementing of the center for environmental monitoring and limiting the risks of climate change at Beni-Suef University will be completed by next year. It will be a unique center at the level of Egyptian universities that will strength the university's role in facing climate changes and in order to achieve the principle of sustainability and Egypt's vision of 2030.

It will aim to the following;

- a) Monitoring all environmental problems in Beni-Suef Governorate
- b) Determining the type and sources of these problems, and their relationship to potential climate changes
- c) Providing appropriate scientific solutions according to the type of each problem
- d) Making a map of climatic challenges and all risks that threaten water and agricultural resources and air pollution
- e) Creating a database of problems which results in negative effects on the environment and directing them to be enrolled in master's and doctoral degrees.
- f) Establishing a number of environmental monitoring stations in cooperation to monitor carbon emissions.
- g) Providing scientific advices in the field of wastewater treatment, and assessing the environmental impact of all development activities and projects at the governorate level.

<https://www.youm7.com/story/2022/7/28/%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D8%A3%D9%88%D9%84-%D9%85%D8%B1%D9%83%D8%B2-%D9%84%D9%84%D8%B1%D8%B5%D8%AF-%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%89-%D9%88%D8%A7%D9%84%D8%AD%D8%AF-%D9%85%D9%86-%D9%85%D8%AE%D8%A7%D8%B7%D8%B1-%D8%AA%D8%BA%D9%8A%D8%B1%D8%A7%D8%AA-%D8%A7%D9%84%D9%85%D9%86%D8%A7%D8%AE/5851077>

Climate action (SDG 13)

SDG13.3.4 Inform and support government

Does your university as a body inform and support local or regional government in local climate change disaster/risk early warning and monitoring?

1. The implementing of the center for environmental monitoring and limiting the risks of climate change at Beni-Suef University will be completed by next year. It will be a unique center at the level of Egyptian universities that will strength the university's role in facing climate changes and in order to achieve the principle of sustainability and Egypt's vision of 2030. It will aim to the following;
 - a) Monitoring all environmental problems in Beni-Suef Governorate
 - b) Determining the type and sources of these problems, and their relationship to potential climate changes
 - c) Providing appropriate scientific solutions according to the type of each problem
 - d) Making a map of climatic challenges and all risks that threaten water and agricultural resources and air pollution
 - e) Creating a database of problems which results in negative effects on the environment and directing them to be enrolled in master's and doctoral degrees.
 - f) Establishing a number of environmental monitoring stations in cooperation to monitor carbon emissions.
 - g) Providing scientific advices in the field of wastewater treatment, and assessing the environmental impact of all development activities and projects at the governorate level.
<https://www.youm7.com/story/2022/7/28/%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D8%A3%D9%88%D9%84-%D9%85%D8%B1%D9%83%D8%B2-%D9%84%D9%84%D8%B1%D8%B5%D8%AF-%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%89-%D9%88%D8%A7%D9%84%D8%AD%D8%AF-%D9%85%D9%86-%D9%85%D8%AE%D8%A7%D8%B7%D8%B1-%D8%AA%D8%BA%D9%8A%D8%B1%D8%A7%D8%AA-%D8%A7%D9%84%D9%85%D9%86%D8%A7%D8%AE/5851077>
2. Center for the Development of Means of Preserving the Environment at BSU aims to identify environmental problems in the province and work to solve them in a scientific manner to reduce them. It also establishes close cooperation with advisory offices, governmental and industrial bodies, and community and scientific institutions, to solve environmental problems and provide specialized technical advice. In addition, it actively contributes to the development and implementation of policies, whether at the governorate or national level.
<https://www.elbalad.news/4414088>
<https://gate.ahram.org.eg/News/2942904.aspx>
<https://www.elwatannews.com/news/details/4316926?t=mpush>



<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D8%A7%D8%B7%D9%84%D8%A7%D9%82-%D9%85%D8%A8%D8%A7%D8%AF%D8%B1%D8%A9-%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A7%D9%84%D8%A3%D8%B3%D8%B7%D8%AD-%D8%A8%D9%8A%D9%86-%D8%B7%D9%84%D8%A7%D8%A8-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D8%A9/4886687>
<https://edu.see.news/new/2020/09/22/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

3. Unit of Consultation and Engineering & Technical Support (UCETS) at BSU includes a group of faculty members who have distinguished experiences in various engineering disciplines. It keeps pace with scientific development and contributes to serving society and the technology industry.

https://www.bsu.edu.eg/Content.aspx?section_id=2150&cat_id=16
https://www.bsu.edu.eg/Content.aspx?section_id=2150&cat_id=16

4. The Central Laboratory and Environment and Water Lab at Faculty of Postgraduate Studies for Advanced Sciences

It contains many devices and tools necessary to conduct analyzes and measurements of water pollutants, and analyzes for different companies and factories inside and outside Beni-Suef Governorate. It helps in making decisions and recommendations necessary to solve many environmental problems related to water pollution and its negative impact on the health of the citizen, which consequently affects the national economy.

<https://www.almasryalyoum.com/news/details/1334930>
<https://www.facebook.com/Central.Lab.AdvancedScience>
https://www.bsu.edu.eg/Content.aspx?section_id=5739&cat_id=18

5. Crisis and Disaster Management Units at different BSU faculties and institutions
They pay a great attention of spreading cultural awareness of crisis and disaster management and training BSU members to implement plans to confront crises and disasters by setting a crisis simulator.

<https://www.youm7.com/story/2018/1/31/%D8%AA%D9%81%D8%B9%D9%8A%D9%84-%D8%A5%D8%AF%D8%A7%D8%B1%D8%A9-%D8%A7%D9%84%D8%A3%D8%B2%D9%85%D8%A7%D8%AA-%D9%88%D8%A7%D9%84%D9%83%D9%88%D8%A7%D8%B1%D8%AB-%D9%88%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%81%D8%B1%D9%88%D8%B9-%D8%A8%D9%83%D9%84%D9%8A%D8%A7%D8%AA-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81/3626738>
https://www.bsu.edu.eg/ContentSide.aspx?section_id=10330&cat_id=12
https://www.bsu.edu.eg/ContentSide.aspx?section_id=6410&cat_id=10



6. The Water Studies and Research Center at Faculty of Earth Science.

It is one of the specialized centers at the level of Egyptian universities in conducting all studies related to the sustainable management of water resources (conventional and Unconventional, renewable and non-renewable) in terms of exploration, evaluation and purification and treatment and reuse as well as desalination, control and quality assurance for all Processes. Where it is concerned with the following strategic goals;

- a) Conducting studies on rising groundwater levels and their negative effects on the surrounding environment and infrastructure, as well as the quality of agricultural soil.
- b) The evaluation of several sewage treatment plants in Beni-Suef, Governorate.
- c) Making the necessary environmental measurements for many factories in Beni-Suef Governorate.
- d) Making an integrated environmental record for the University (making environmental measurements for the various faculties of BSU from classrooms, student laboratories, research laboratories, service units) and providing recommendations and proposals with periodic follow-up every 6 months.
- e) Make a plan to educate citizens on how to rationalize the consumption of water resources and make good use of them, provided that the university members implement this plan during the summer vacation in some villages of Beni-Suef Governorate.

<https://www.facebook.com/BSUintoffice/posts/3757377684276585/>

<https://www.earthsc.bsu.edu.eg/Backend/Uploads/PDF/%D9%85%D8%B7%D9%88%D9%8A%D9%87%20%D8%A7%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D9%85%D8%AD%D9%88%D9%84.pdf>

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155769&cat_id=1

https://www.bsu.edu.eg/NewsDetails_New.aspx?NID=155373&cat_id=1

https://www.bsu.edu.eg/News.aspx?NID=96324&cat_id=1

https://www.bsu.edu.eg/News.aspx?NID=151395&cat_id=1

https://www.bsu.edu.eg/Sector_Home.aspx?cat_id=382

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D9%87%D9%8A%D9%83%D9%84-%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://www.facebook.com/BSUUniv/photos/%D8%A7%D9%84%D8%AA%D9%86%D8%B8%D9%8A%D9%85%D9%8A-%D9%84%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D8%B7%D9%88%D9%8A%D8%B1-%D8%A7%D9%84%D8%A3%D8%AF%D8%A7%D8%A1-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D9%8A/2977523048925067/>

<https://akheralasbo3.com/96647.html>

https://www.coenano.bsu.edu.eg/News.aspx?NID=151999&cat_id=372

<https://shbabbek.com/show/147550>



Climate action (SDG 13)

SDG 13.3.5 Environmental education collaborate with NGO

Does your university as a body collaborate with NGOs on climate adaptation?

- A. Center for the Development of Means of Preserving the Environment at BSU aims to identify environmental problems in the province and work to solve them in a scientific manner to reduce them. It also establishes close cooperation with advisory offices, governmental and industrial bodies, and community and scientific institutions, to solve environmental problems and provide specialized technical advice. In addition, it actively contributes to the development and implementation of policies, whether at the governorate or national level. For example; the participation of the center in the “Get ready for the green” campaign, with the participation of the Egyptian Group for the Recycling of Agricultural and International Waste for Environmental Services, under the supervision of the Ministry of Environment (“Get ready for the green initiative”), raising awareness on how to dispose of used masks and waste, and making posters to distribute them to the Traffic Department and various government agencies to be placed on cars and bodies government, after the approval of the Ministry of Environment.

<https://www.elbalad.news/4414088>

<https://gate.ahram.org.eg/News/2942904.aspx>

<https://www.elwatannews.com/news/details/4316926?t=mpush>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D8%A7%D8%B7%D9%84%D8%A7%D9%82-%D9%85%D8%A8%D8%A7%D8%AF%D8%B1%D8%A9-%D8%B2%D8%B1%D8%A7%D8%B9%D8%A9-%D8%A7%D9%84%D8%A3%D8%B3%D8%B7%D8%AD-%D8%A8%D9%8A%D9%86-%D8%B7%D9%84%D8%A7%D8%A8-%D8%A7%D9%84%D8%AC%D8%A7%D9%85%D8%B9%D8%A9/4886687>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

<https://www.youm7.com/story/2020/7/19/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%8A-%D8%B3%D9%88%D9%8A%D9%81-%D9%85%D8%B4%D8%A7%D8%B1%D9%83%D8%A9-%D9%85%D8%B1%D9%83%D8%B2-%D8%A7%D9%84%D9%85%D8%AD%D8%A7%D9%81%D8%B8%D8%A9/>

- B. A cooperation protocol between the Faculty of Science – Beni-Suef University and Beni-Suef Cement Factory (Titan - Egypt) that is renewed annually with the consent of both parties. It aims to qualify and train college students for the labor market in the fields of modern research related to cement, with the aim of improving the quality of higher education in its applied concept. The training programs available by the cooperation protocol, encourage students groups to do research projects concerning with the society, the university or the environment, such as topics related to global warming and renewable energy.

<https://www.elwatannews.com/news/details/3907047>

<https://www.shorouknews.com/news/view.aspx?cdate=31072019&id=a99aa6f8-0ee0-4686-95f4-493ab40d265e>



شركة أسمنتت بنى سويف

السنة جامعة بنى سويف

عناية السيد رئيس الجامعة الأستاذ الدكتور / منصور حسن

الموضوع: مبادرة دعم مشروع تأهيل طلبة كلية العلوم

يتعاون بين شركة أسمنتت بنى سويف (تيتان مصر) وكلية العلوم - جامعة بنى سويف

تعبئة طبية و بعد ...

بالإشارة الى الموضوع عظيمه وفي إطار خطة التوطين الخاصة بالاهتمام بالطلبة وتأهيل شباب الخريجين، وفي إطار دعم المشاركة بين الصناعة و الكلية العلمية لتهيئة الأجيال الجديدة على التقنيات الحديثة.

لتتروفا شركة أسمنتت بنى سويف (تيتان مصر) بأن تتعاون مع كلية العلوم بجامعة بنى سويف لدعم مشروع تأهيل الطلبة في برنامج تطوير المهارات الأكاديمية والعملية للطلاب في المجالات الآتية:

- الأمن الصناعي والبيئة
- إدارة المشروعات.
- الموارد البشرية والمهارات المهنية.
- إدارة الجودة ونظم ضمانات شهادات الأيزو.
- المعدات المستخدمة في المرافق بالمصانع.
- المحاسبة.
- المبيعات والتسويق.

حيث يستفيد الطلاب في خلال فترة البرنامج من الخدمات العملية للطلبة المبرزين القراء المتفهمين بالشركة في هذه المجالات.

هذا وسوف تتكفل شركة أسمنتت بنى سويف (تيتان مصر) بالآتي:

- 1- تدريب الطلبة بواسطة متخصصين الشركة في مجالاتهم بتقانات الكلية
- 2- توفير المادة العلمية للطلبة بنى سويف / نسخة الكترونية.

ويقدم البرنامج (في برنامج مكثف ومختصر بهدف طلبة الكالوريوس أثناء اجازة نصف العام الدراسي ويختتم بمعرفة سيشن الأمن الصناعي والبيئة وإدارة المشروعات، وبرنامج شامل بهدف طلبة مرحلة ما قبل الكالوريوس أثناء اجازة الصيفيه ويتمثل جميع المجالات السابق ذكرها وعلى الطلاب التقدم مع نهاية البرنامج بتقديم تقرير (مشروع) دراسة حالة كترتيب اعليتي لما تم دراسته والعرض أمام إدارة الجامعة والسكنا أعضاء هيئة التدريس المعنيين وبمباي إدارة شركة أسمنتت بنى سويف (تيتان مصر) وبعض ممثلي المنحج المتلى بالمحافظة.

بعد الانتهاء بصورة مرضية من البرنامج سيكون لمتسبي قد اكتسبوا الكثير من المهارات و الخبرات التقنية والعملية لى سويف مما دعم بصورة كبيرة بعد التخرج على الإلتحاق بساح في وظائف المكاتب الإستشارية و الجهات الصناعية لقرأ للخدمات و المهارات المكتسبة من هذا البرنامج.

ويعتبر هذا البرنامج كحل ساري للعام الدراسي 2018/2019 على أن يجدد سنويا بموافقة الطرفين.

لتقدير أن يكون التزامنا على موافقة سياتكم واتمنى لكم ولأعضاء هيئة التدريس الموفرة وأنصعب العنتة نواج التوفيق.

عن جامعة بنى سويف

 Signed with
 the authority of
 BENI-SUEF CEMENT COMPANY
 Benha branch - Beni-Suef - Egypt

عن شركة أسمنتت بنى سويف (تيتان مصر)



أسمنتت بنى سويف

ملوية انور شارالمدريج على جملاني البر كصناعة عتصماتس القادس 2002



Photos of the field visit of the Titan Factory during the training program held in the summer of 2019

- C. The Excellence Center for the economic production of approved nanometric materials establishes a small certified factory to produce specific and approved nanometric materials needed by society and by industry to be an example of linking research with industry. Nanometric materials can be used in the fields of clean energy storage, safe and highly efficient energy devices, and improving and developing water management and treatment.

<https://www.elbalad.news/3716813>

https://www.bsu.edu.eg/ContentSide.aspx?section_id=633&cat_id=16

- D. A cooperation protocol between the university and Chinese Research Center of Excellence for Water Management and Technology for the treatment of sewage and industrial wastewater in the northern Upper Egypt region, as described by the below image;

قرارات مجلس جامعة بني سويف رقم (١٧٨) بتاريخ ٢٠١٩/١٢/٣١ م

رقم الموضوع: (٢١١)

أمانة المجلس واللجان

الجهة الصادر لها:
الموضوع:

المذكورة المعروضة من مدير مركز تطوير وسائل المحافظة على البيئة بشأن الموافقة على إنشاء مركز التميز البحثي المصري الصيني لإدارة وتكنولوجيا المياه من خلال مركز تطوير وسائل المحافظة على البيئة وذلك على النحو المعروض .

القرار
وافق المجلس

أمانة المجلس واللجان
مجلس الجامعة
١٧٨
٢٠١٩/١٢/٣١

يعتمد ...
رئيس الجامعة - رئيس المجلس
د. منصور حسن

أمين عام الجامعة - أمين المجلس



- E. Scientific cooperation programs with Italy under the auspices of the Science, Technology and Innovation Funding Authority in fields of renewable energy, materials science and engineering and environmental sciences.
https://www.bsu.edu.eg/News.aspx?NID=156044&cat_id=361
- F. A cooperation protocol between BSU and the universities of Toliara in Madagascar and Dakar in Senegal in the scientific fields, and the expansion of the establishment of new programs in various projects and activities, such as engineering consultancy services in the fields of renewable energy and water.
<https://www.elwatannews.com/news/details/5258570>
- G. The Office of Consultation and Linking Research to Industry affiliated to the University Performance Development Center at BSU, opens unconventional permanent channels of communication between the university, industry and society. It is concerned with marketing the results of applied scientific research projects for industry and the private sector, whether local or international, in coordination with the beneficiary authorities and heads of research projects.
<https://www.youtube.com/watch?v=LDz59R7pPoM>
https://www.bsu.edu.eg/Content.aspx?section_id=14560&cat_id=414
- H. The Unit of Consultation and Engineering & Technical Support (UCETS) includes a group of faculty members who have distinguished experiences in various engineering disciplines. It keeps pace with scientific development and contributes to serving society and the technology industry.
https://www.bsu.edu.eg/ContentSide.aspx?section_id=633&cat_id=16
<https://www.elwatannews.com/news/details/5813953>
- I. Beni-Suef University made a partnership with the Center of Excellence for Water, a USAID funded project where;
1. Centre of excellence in water research in cooperation with 5 Egyptian universities and 5 US universities funded from USAID is concerned with Exchange and training, education, governance, sustainability and research. It develops scientific solutions to water problems from lack of supplies and pollution, and develops the infrastructure for water research laboratories. It is also concerned with the discussion of the current and future challenges, innovative solutions and outlook for industrial waste water treatment in Egypt.
 2. Beni-Suef University is the co-chair for the sustainability phase.
 3. The Center of Excellence for water COE-Water is involved in third public private partnership PPP with Egypt aiming to long-term sustainability of the COE-water activities.
 4. Six Research teams from Beni-Suef University won 6 competitive projects in the water research field.
 5. BSU was the top university from the list of the winning Egyptian universities that won 48 master's scholarships from the water Excellence Center.
<https://www.almasryalyoum.com/news/details/2407801>



<https://www.facebook.com/egyptcoewater/posts/406066994067902>

https://www.bsu.edu.eg/News.aspx?NID=86718&cat_id=1&fbclid=IwAR2i3qZcCALJIWmlu#

https://www.bsu.edu.eg/News.aspx?NID=150952&cat_id=1

https://bsu.edu.eg/SingleNews.aspx?NID=152109&cat_id=1#:~:text=%D8%A7%D9%84%D8%B9%D8%A7%D9%85%D8%A9%20%D9%84%D9%84%D9%85%D8%B4%D8%B1%D9%88%D8%B9%D8%A7%D8%AA%20%D8%A7%D9%84%D8%A8%D9%8A%D8%A6%D9%8A%D8%A9-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9%20%D8%A8%D9%86%D9%8A%20%D8%B3%D9%88%D9%8A%D9%81%20%D8%AA%D8%AA%D8%B5%D8%AF%D

<https://www.rayalauma.com/2022/09/15/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%A7%D9%84%D8%AD%D8%B5%D9%88%D9%84-%D8%B9%D9%84%D9%89-6-%D9%85%D8%B4%D8%B1%D9%88%D8%B9%D8%A7/>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.rayalauma.com/2022/09/15/%D8%B1%D8%A6%D9%8A%D8%B3-%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%A7%D9%84%D8%AD%D8%B5%D9%88%D9%84-%D8%B9%D9%84%D9%89-6-%D9%85%D8%B4%D8%B1%D9%88%D8%B9%D8%A7/>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.youm7.com/story/2019/9/4/%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81-%D8%AA%D8%B4%D8%A7%D8%B1%D9%83-%D9%81%D9%89-%D9%85%D8%B4%D8%B1%D9%88%D8%B9-%D8%A5%D9%86%D8%B4%D8%A7%D8%A1-%D9%85%D8%B1%D9%83%D8%B2-%D8%AA%D9%85%D9%8A%D8%B2-%D8%B9%D9%84%D9%85%D9%89/4403354>

<https://www.egyptcoewater.eg/sustainability/>

<https://wrc.wsu.edu/organization/beni-suef-university/>



USAID
FROM THE AMERICAN PEOPLE



**The American
University in Cairo**

Center of Excellence for Water

**CENTER OF EXCELLENCE FOR
WATER**

BRIEF ON

**BENI SUEF UNIVERSITY
PARTICIPATION IN THE CENTER OF
EXCELLENCE FOR WATER**

**Project Name: Center of Excellence for Water
Award Number: 72026319CA00001
Reporting Period: (February 2019 – October 2022)**

Submitted by: Prof. Essam Shaban, Chief of Party of
the Center of Excellence for Water

Participation of Beni Suez University in the Center of Excellence for Water's Activities

The following sections describe the participation of Beni Suez University in key activities from February 2019 to October 2022:

Component I: Governance

- Beni Suez University (BSU) participated in the governance workshop held in Cairo from October 24-29, 2021 (3 participants).

Component II: Instructional Innovation and Curriculum Development

- Undergraduate Courses Development: 17 courses were assigned to 24 Egyptian faculty from the 5 EPU, among them 1 course-developer from BSU assigned for 3 courses.

Component III: High-Quality Applied Research

- Small, Medium and Large Research Grants: The largest number of research proposals were submitted by BSU; 20 research proposals, 6 Research grants contracted with Beni Suez University (BSU), 5 Large-size projects - 8 medium-size projects - 4 small-size projects
- Out of 21 shortlisted proposals 6 are ~~are~~ contracted (1 Large, 2 medium & 3 small).
- Cairo Water Week: active participation of BSU in CWW2020, CWW2021 and CWW2022.
- International Symposium: active participation of BSU in the Center of Excellence for Water International Symposium held in September 2022.

Component IV: Exchange, Training and Scholarships

- Training and Workshops (Total of 17 participants from BSU):

The Center of Excellence for Water Organized 10 training for EPU as follows :

1. Learning Management System using Moodle; held at Alexandria University from February 4-6, 2020 (25 participants; 2 from BSU)

- ~~2. Advanced Learning Management System (LMS) Workshop; held from February 24 - March 6, 2020, at Utah State University. (9 participants; None from BSU)~~

- ~~3.2. Water-Energy-Food (WEF):~~

~~WEF 2020: held from November 9 - December 9, 2020, (12 Participants, 1 from BSU)~~

~~WEF 2021: held from December 12 2021 to March 31 2022 (28 Participants, 10 from BSU)~~

- ~~4.3. Innovative Teaching Strategies workshop; held online from January 28 - March 10, 2021, with face-to-face follow-ups in Ain Sokhna (April 2021) and Alexandria (October 2021). (9 participants; 1 from BSU)~~

- ~~5.4. Governance and Strategic Planning Workshop; held in Cairo from October 24-29, 2021. (19 participants; 3 from BSU)~~

- ~~6.5. A series of tailored training were delivered for the EPU (in cooperation with the Pedagogical Innovation and Distance Learning Unit at Alexandria University) including a face-to-face training on "Learning Management Systems" at BSU (10 participants).~~

- ~~7.6. Three Water Quality workshops:~~

~~First Water Quality Workshop: 19 Participants non from BSU~~

Climate action (SDG 13)

SDG 13.4.1 Commitment to carbon neutral university

Does your university as a body have a target data by which it will become carbon neutral according to the greenhouse gas protocols?



Overview of Green Strategies and Technologies implemented at Beni-Suef University

BSU has key implementation points to promote carbon reduction that focus on clean transportation, renewable energy, pollution prevention and waste management, energy efficiency, water management and wastewater treatment

1.1. These include, but are not limited to, the following points;

- 1.1.1. The university is directed to restore the old buildings with better insulation.
- 1.1.2. Finding alternative environmentally friendly modes is one of the most important concerns for all parts of the organization.
- 1.1.3. The periodic supervision of the University's administrative security for all offices, research laboratories and halls after the end of the official working hours, to ensure that all light sources are closed.
- 1.1.4. The use of light – colored paints inside college buildings.
- 1.1.5. Distribution of ventilation holes in halls, offices, roads and building entrances.
- 1.1.6. Using of energy-saving and self-battery research devices.



- 1.1.7. Providing energy-saving air conditioners and refrigerants.
- 1.1.8. The solar energy project is circulated within different parts of Beni-Suef University.
- 1.1.9. Increasing of the green space.
- 1.1.10. Rationalizing the consumption of the daily amount of water contributes to save the energy.
- 1.1.11. Leaky taps or toilets are repaired immediately
- 1.1.12. There is a periodic inspection of all water taps in faculties, institutes and various centers in the university.
- 1.1.13. Periodic maintenance of water lines by the General Administration of Engineering Affairs of the university.
- 1.1.14. different water-saving equipment within Beni-Suef University
- 1.1.15. Faculty of Earth Science, Faculty of Science and Faculty of Postgraduate Studies for Advanced Sciences have centers and laboratories that are concerned with the conservation, development and good management of water resources through the purification of drinking water, sewage treatment.
<https://www.elbalad.news/3263431>
<https://www.facebook.com/advancedsciences/videos/459802619399287/>
https://www.earthsc.bsu.edu.eg/Content.aspx?side_id=1611&cat_id=50
https://www.earthsc.bsu.edu.eg/ContentSide.aspx?section_id=4023&cat_id=50
<https://www.facebook.com/100024024607600/videos/1330582720708432/>
https://www.psas.bsu.edu.eg/ContentSide.aspx?section_id=11742&cat_id=18
https://www.psas.bsu.edu.eg/Content.aspx?section_id=5745&cat_id=18
<https://www.science.bsu.edu.eg/>
https://1drv.ms/v/s!Am6_uteZODGndCSsZACPjy8IKhQ
https://1drv.ms/v/s!Am6_uteZODGndX-bG5fkTgsjC5Y
- 1.1.16. The strict instructions for smoking reduction/
- 1.1.17. Directing to replace petrol and diesel tanks with cars and buses running on natural gas or biofuel.
- 1.1.18. Expanding in the green space in all campuses of BSU.
- 1.1.19. Periodic maintenance of the vehicles (buses, minibuses, transport vehicles and private cars) at the university
- 1.1.20. Presence of chimneys and hoods in the places of food preparation and services at the university.
- 1.1.21. Presence of programs for university waste recycling and reducing the use of paper and plastic in the university.
- 1.1.22. Different campaigns, initiatives, workshops and seminars are always launched to raise the awareness of energy and water saving and to encourage youth to find innovative solutions for energy problems.
https://www.bsu.edu.eg/Backend/Uploads/PDF/SDG/SDG/University%20Report%202019_compressed.pdf
<https://www.draminlotfyoffice.com/details/422>
<https://www.elbalad.news/3192479>
https://www.bsu.edu.eg/News.aspx?NID=48763&cat_id=1

1.1.23. The Getting funding for a large number of research projects in the energy field.

https://www.bsu.edu.eg/News.aspx?NID=64075&cat_id=1

<https://www.youm7.com/story/2020/3/5/%D8%A7%D9%84%D9%85%D9%86%D8%AD-%D8%A7%D9%84%D8%AF%D8%B1%D8%A7%D8%B3%D9%8A%D8%A9-%D9%81%D9%89-%D9%85%D8%AC%D8%A7%D9%84-%D8%A7%D9%84%D8%B7%D8%A7%D9%82%D8%A9-%D8%A7%D9%84%D9%85%D8%AA%D8%AC%D8%AF%D8%AF%D8%A9-%D9%86%D8%AF%D9%88%D8%A9-%D8%A8%D8%AC%D8%A7%D9%85%D8%B9%D8%A9-%D8%A8%D9%86%D9%89-%D8%B3%D9%88%D9%8A%D9%81/4659002>

https://www.bsu.edu.eg/Content.aspx?section_id=4559&cat_id=290

https://www.bsu.edu.eg/Content.aspx?section_id=4547&cat_id=290

<https://www.shorouknews.com/news/view.aspx?cdate=25072019&id=ddaa821-f03d-4e6d-aa8f-eff2374df6b5>

1.1.24. Faculty of Postgraduate studies for Advanced Sciences has a strong infrastructure of integrated devices and laboratories that continuously conducts advanced researches and studies to solve environmental problems and to achieve the sustainable development goal based on reducing carbon dioxide emissions.

<https://www.facebook.com/advancedsciences/videos/437018341678633/>

<https://onedrive.live.com/?authkey=%21ACsZACPjy8IKhQ&cid=A7313899D7BABF6E&id=A7313899D7BABF6E%21116&parId=root&o=OneUp>

<https://www.facebook.com/advancedsciences/videos/459802619399287/>

https://www.psas.bsu.edu.eg/ContentSide.aspx?section_id=11742&cat_id=18

https://www.psas.bsu.edu.eg/Content.aspx?section_id=5745&cat_id=18

https://www.psas.bsu.edu.eg/Content.aspx?section_id=5780&cat_id=18

1.2. The university holds periodic meetings with different BSU centers and units

To promote environmental sustainability and to discuss the energy and water saving plans for the upcoming academic years and regularly supervise and review the implementation of the campus plans. For example;

1.2.1. Meeting with the Office of International Ranking and Sustainable Development to discuss its reports and discuss proposed recommendations about the goals of sustainable development for the university according to the vision of Egypt 2030 for the following year.

1.2.2. Meeting with Center for the Development of Means of Preserving the Environment to identify environmental problems, to combat their causes, and to show monitoring reports and referring violations of the environment.

<https://www.shorouknews.com/news/view.aspx?cdate=26082020&id=dc23f069-d73e-4ff9-b907-cbcdeee013b3>

<https://www.elwatannews.com/news/details/4316926?t=mpush>

https://www.bsu.edu.eg/News.aspx?NID=151567&cat_id=1

https://www.bsu.edu.eg/Content.aspx?section_id=11198&cat_id=1

<https://www.facebook.com/env.bsu/>

https://www.science.bsu.edu.eg/ContentSide.aspx?section_id=6392&cat_id=10



1.3. No doubt that the energy sector is the largest emitter of carbon emissions and is the largest contributor to climate change compared to other sectors in the world in the upcoming periods

BSU is planning to the following;

- 1.3.1. BSU arranges a budget for energy-saving improvement projects annually and it pays a great attention to rationalize energy consumption
- 1.3.2. BSU is planning to install new roof-mounted photovoltaic panels on the various buildings in 2023 and 2024.
- 1.3.3. Generalizing the use of lamps and lighting poles with light sensors inside all different buildings of the university. This allows the automatic lighting and closing in response to sunlight and hence, energy saving and reducing climate change.
- 1.3.4. Providing different buildings with more modern and energy-saving means such as smart outlets that allow the passage of sunlight with keeping the atmosphere cool leading to a reduction in the use of air conditioners.
- 1.3.5. The university seeks to fulfill the pledge to provide 100% renewable energy through collaboration projects, research projects, and related activities. The related procedures are as follows:

1.4. Conclusion

Building on the implemented energy and water savings and carbon reduction policies over the next 7-8 years, by 2030, BSU Campuses are expected to reach carbon neutrality before 2030.



Climate action (SDG 13)

SDG 13.4.2 Achieve by

In conclusion, BSU is expected to achieve preliminary carbon neutrality before 2030.