



# **National Research Centre Cairo, Egypt**

**Prof. Fagr Abdel-Gawad**

Acting president of the NRC, Cairo, Egypt

[President@nrc.sci.eg](mailto:President@nrc.sci.eg)





# NRC 2024



**Since 1956**

- **12 Feddans.**
- **11 Research buildings.**
- **3 Administration buildings.**
- **10 Store rooms.**
- **Animal houses.**
- **Green houses.**
- **6 Experimental stations.**
- **Research farm 350 feddans.**
- **The new NRC branch in 6<sup>th</sup> of October city**
- **6 Centres of excellency**



# NRC

*The major multi-disciplinary  
R&D Institute in Egypt*

- Devoted to basic and applied research.
- The largest of all institutions affiliated to the Ministry of Scientific Research.
- Employs about 70% of all scientists working in these institutions.





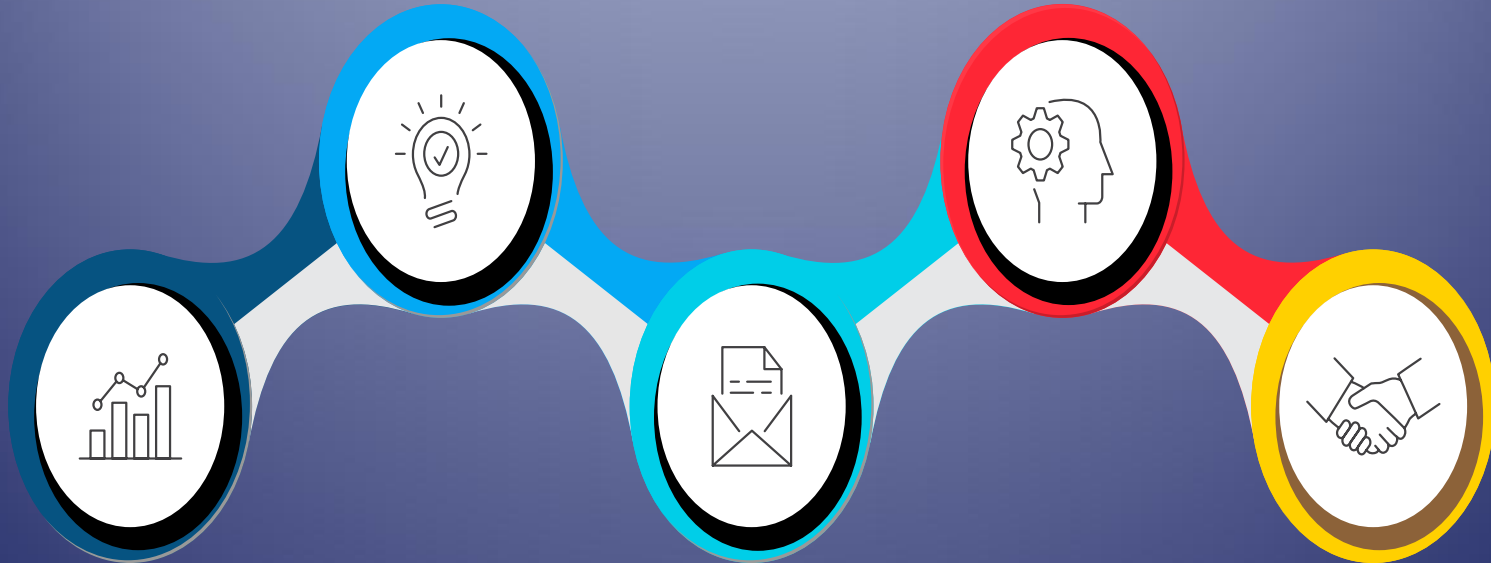
# Core Values

## Innovation

Driving cutting-edge research and technology to solve complex problems and enhance quality of life

## Sustainability

Promoting practices that address environmental, social, and economic challenges for long-term benefits



## Excellence

Achieving the highest standards in research quality and operational efficiency.

## Integrity

Maintaining ethical standards and transparency in all activities

## Collaboration

Building strong partnerships to enhance research capabilities and share resources.



# Research Institutes

## Health and Environment

Environment and climate changes

Medical Research and Clinical Studies

Oral and Dental Research

Human Genetics & Genome

## Industrial Research

Advanced Materials Technology and Mineral Resources

Chemical Industries

Engineering Res. & New and Renewable Energy

Chemistry & Technology of Textiles

Pharmaceutical and Drugs Industries

Food Ind. and Nutrition

## Agriculture and Biology

Agricultural & Biological Research

Veterinary Research

## Basic Sciences

Biotechnology Researches

Physics



# NRC Strengths

## Man Power

**Research staff: 3600**

**Scientific assistance: 1600**

**Administrative staff: 1800**



# **The NRC Company and Incubator Ecosystem**

**National Research  
Center for  
Innovative Products  
Company**

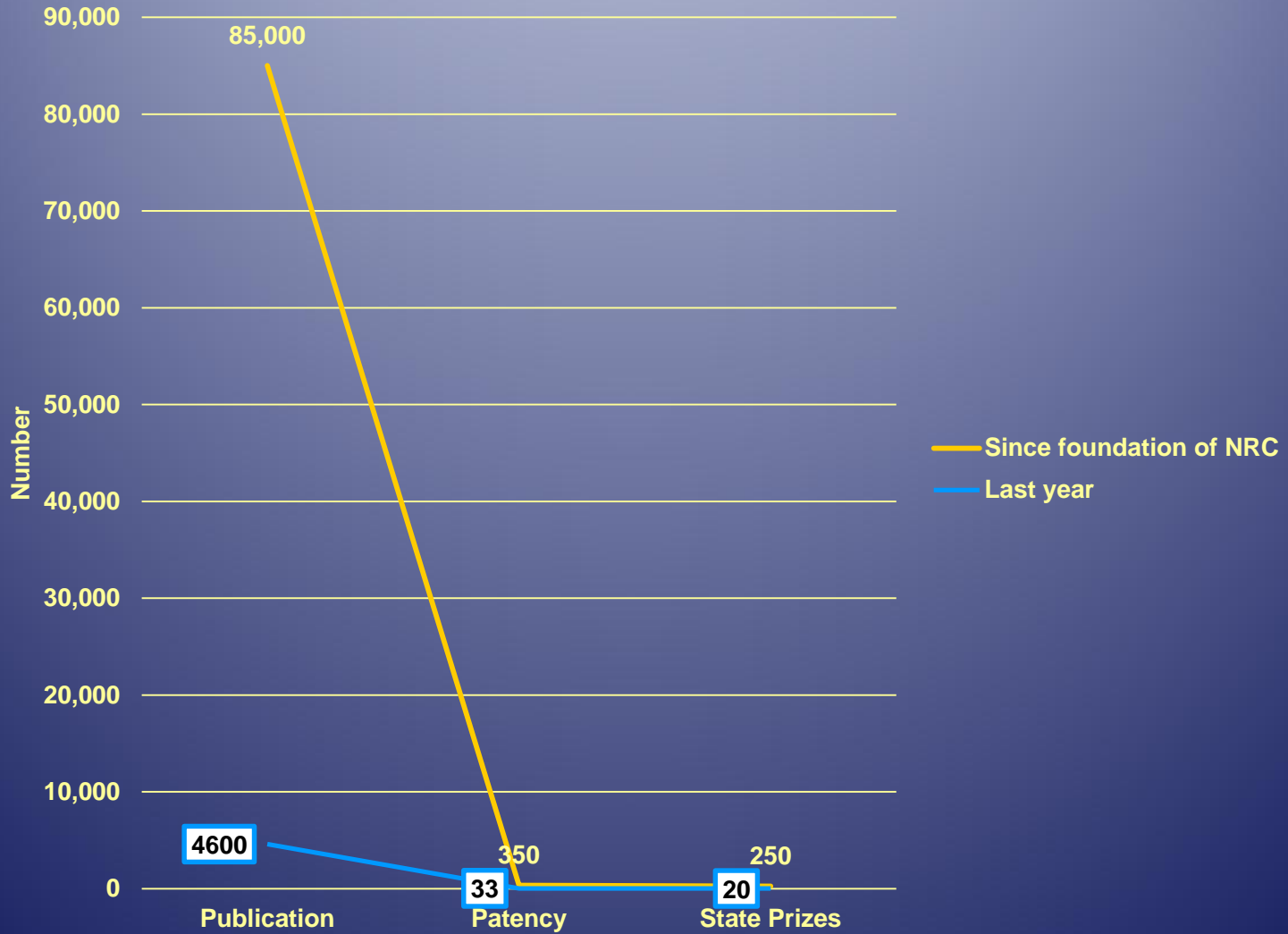
**Incubator for Health  
and  
Pharmaceutical  
Products**

**Incubator for  
Deepening  
Local Manufacturing**





# International Publications, Patents and State Prizes



# Accreditation and quality certificates

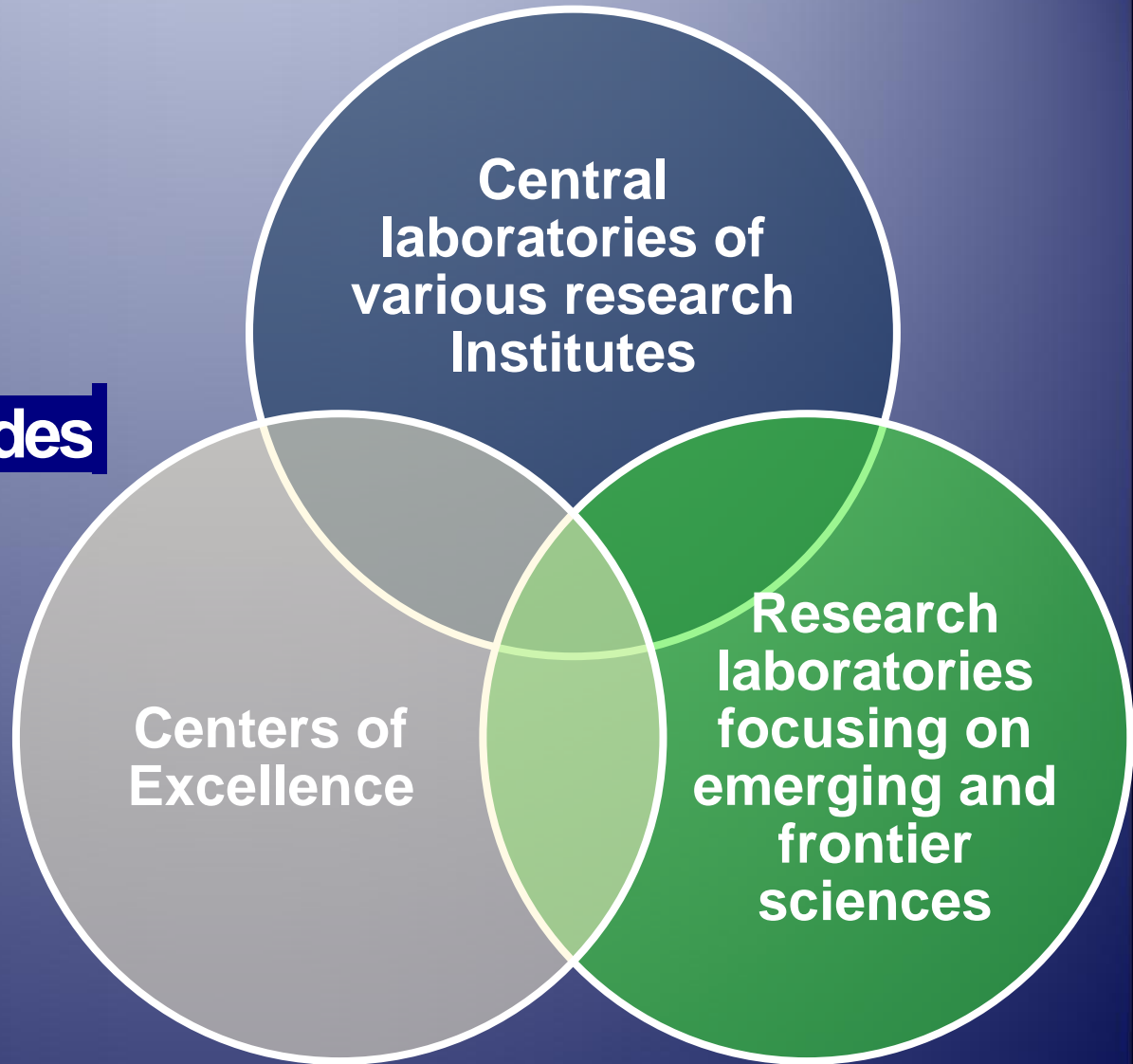
- All the institutes have certificate of ISO 9001 : 2015.
- About 19 Labs obtained ISO / IEC 17025 : 2017.
- The training unit has certificate of ISO 29990: 2010.
- The medical excellence center obtained the ISO 45001: 2018 certificate for health and safety management.



# Central Laboratories Network



**The structure includes**





# Laboratories serving emerging and frontier sciences

Atomic Spectra

Biotechnology in  
Animal Breeding

High throughput  
Chromatographic  
Analysis

Flat-Sheet-  
Membranes

Liquid Crystals.

Materials  
Engineering and  
Geophysical  
Exploration

Microscopy

Molecular  
Spectra

Proteomics  
Research

Surface Nano-  
Characteristics  
Investigations

Veterinary  
Vaccines  
Technologies  
Laboratory





# The Centers of Excellence

**Center of Excellence  
for Advanced  
Sciences (CEAS).**

**Center of Excellence  
for Influenza Research  
(CEIR).**

**Center of Excellence  
for Innovative Textile  
Technologies and  
Products (CEITP).**

**Center of Excellence  
for Research and  
Applied Studies of  
Climate Changes and  
Sustainable  
Development**

**Center of Excellence  
for Human Genetics.**

**Embryos and Genetic  
Resources  
Conservation Bank  
(EGRCB).**



# SCIMAGO Ranking

**NATIONAL RESEARCH CENTRE RANKED IN THE FIRST PLACE IN THE SCIMAGO INSTITUTIONS RANKING IN THE MIDDLE EAST & NORTH AFRICA REGION IN THE PERIOD: 2020–2024)**





# Highlights of the Progress made during the Last Year

## Main Axes of the Current NRC Research Plan (2022 – 2025)

**Strategic Industries (108)**

**Frontier Sciences (100)**

**Water (27)**

**Energy (25)**

**Agriculture and Food (110)**

**Health and Population (118)**

**Community and Sustainable Developments (8)**

**496 research projects (out of 706 proposal)**



# Highlights of the Progress made during the Last Year

## Projects Currently Funded by Other Organizations

Science,  
Technology &  
Innovation Funding  
Authority (54)

Academy of  
Scientific Research  
and Technology  
(47)

Private sector (14)

European Fund  
[Partially and  
completely] (16)

American Fund  
[Partially and  
completely] (8)

Chinese Fund  
[Partially] (9)

148research  
projects



# Research Products

The NRC has 315 products which are ready for mass production (21 of them were already sold in the market)

**Pharmaceutical products**

**Cosmeceutical products**

**Antimicrobial textiles**

**Functional foods**

**Solar plants**

**Functional polymers**





# NRC-Community Service





# Examples of the NRC Research Outputs

**Anti-aging cream  
from algae  
(registered)**

**Antimicrobial  
textiles (sold in  
market)**

**New methods for  
diagnoses and  
treatment of  
genetic diseases**

**New species of  
mulberry for  
production of  
natural silk**

**New technologies  
for water  
desalination**



# Previous Collaboration with COMSATS





# Previous Collaboration with COMSATS

**In collaboration with the International Center for Climate and Environment Sciences, Institute of Atmospheric Physics, Chinese Academy of Sciences:  
Establishment of the Centre of Excellence for Research & Applied Sciences on Climate Change & Sustainable Development of National Research Centre (2020)**





# Previous Collaboration with COMSATS

**The 4<sup>th</sup> International Workshop and Conference on “Nano-materials and Nano-devices”: 8<sup>th</sup> – 9<sup>th</sup> December, 2014**



**International Workshop: Water Resources: Expected Crisis and Strategies of Predominance”, 2019**





# Previous Collaboration with COMSATS



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# Previous Collaboration with COMSATS

Hosting the 10<sup>th</sup> & 20<sup>th</sup> CCC meeting in 2007 & 2017







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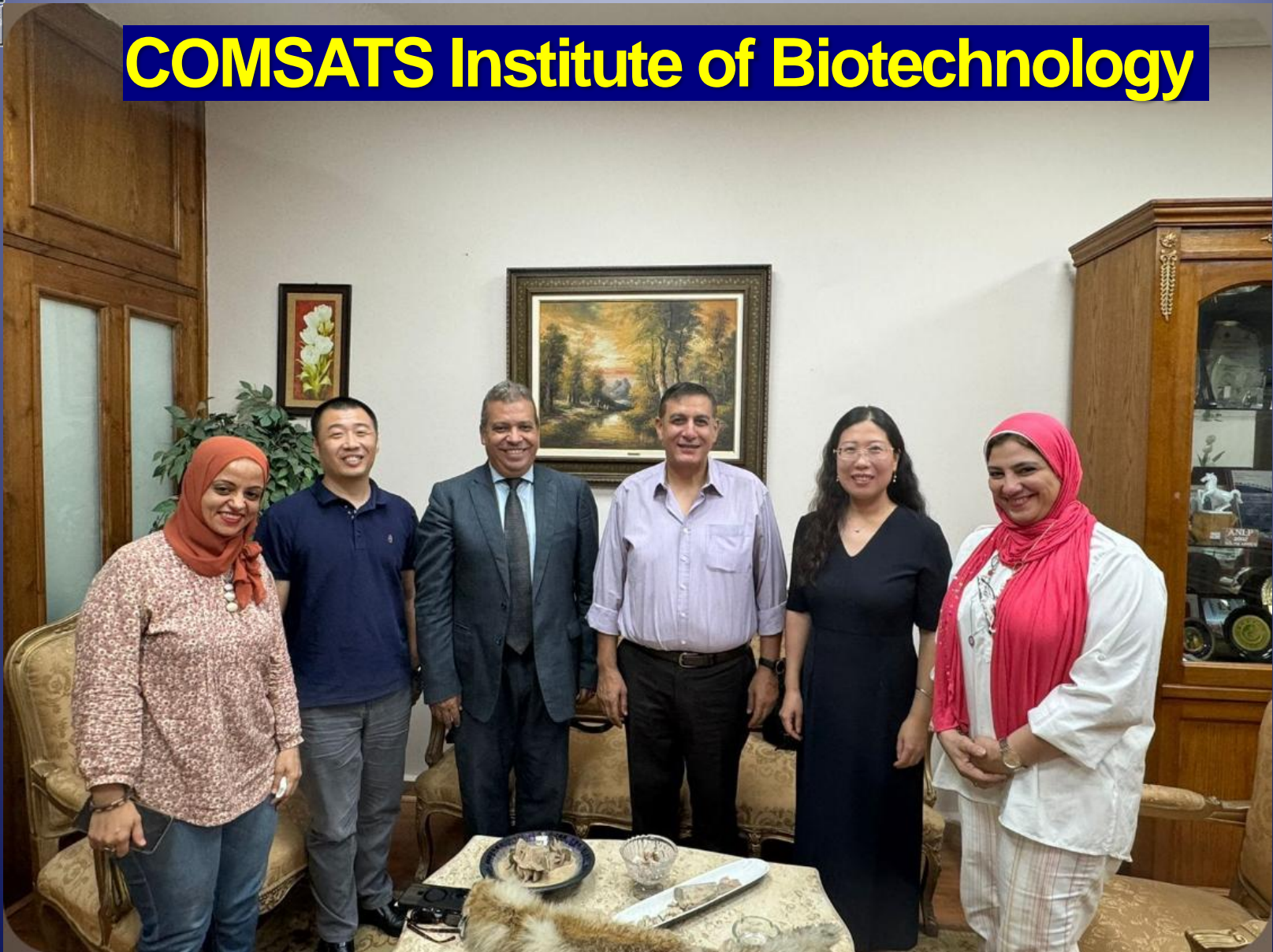






# Previous Collaboration with COMSATS

## COMSATS Institute of Biotechnology





# **Collaborations with other Centres of Excellence**

**MoU with the  
International Center  
for Climate and  
Environment  
Sciences, Institute  
of Atmospheric  
Physics, CAS,  
China**







# **Collaborations with other Centres of Excellence**

**Letter of intent with  
the BCSIR, Dakka,  
Bangladesh**





# **Collaborations with other Centres of Excellence**

**Letter of intent with  
the TIB, Tianjin,  
China**





# **NRC-Short-term plans to Enhance South-South and Triangular Cooperation**

**Capacity building programs in different fields**

**Tropical diseases**

**Water researches**

**Sustainable water management in the rural and remote areas**

**Water-food-energy nexus under climate changes**

**combating schistosomiasis in water through mechanical means and solar canals**

**Control insects pests on agriculture crops**



# **NRC-Long-term plans to Enhance South-South and Triangular Cooperation**

**Climate changes**

**Low emission  
transportation**

**Renewable energy**



# Bulletin of the National Research Centre (BNRC)

- Bulletin of the National Research Centre is an international, multidisciplinary, peer-reviewed, open access, free of publication or processing charges e-journal. It is designed for the wide and rapid dissemination of high-quality trending scientific research in different scientific fields to a worldwide audience.
- Journal link: <https://bnrc.springeropen.com/>





Thank You