NRSC'2023 PROGRAM SUMMARY

Tuesday, May 30th, 2023

9:00 – 10:00	**Registration**	
10:00 –11:30	**Opening Ceremony**	
11:30 –12:00	**Break**	
12:00 –13:00	**Keynote Speech KS-1** **Disrupting the Photonics Domain through Paradigm-Shifting Computational Models** **Prof. Salah Obayya** **UNESCO Chair, Fellow IEEE, OSA, SPIE, AAS, ACES, HEA, IEE, IOP Honorary Chair Professor of Photonics, Director of Center for Photonics and Smart Materials (CPSM), Zewail City of Science and Technology, Egypt** **Main Hall**	
13:00-13:30	**Prayers Break**	
13:30 –15:00	**Technical Session** **Communication and Radio Sciences in Egypt: A Future Vision** **Room (A)**	**Session_D1** Electronic Devices for Communications **Room (B)**
15:00 –16:30	**Session_C1** Signal Processing **Room (A)**	**Session_B1** Antenna Design **Room (B)**
16:30 – 18:00	**WIRS Session** **Radio Science Education:** **Challenges and Future WIRS Perspectives** **Room (A)**	
18:00 –18:30	**LUNCH**	

Wednesday, May 31st, 2023

9:00 –10:30	**Session_C2** IOT Systems and Security	**Session_B2** New trends in the Design of Antenna Arrays-I	**Session_D2** Optical and Photonic Devices- I
	Room (A)	**Room (B)**	**Room (C)**
10:30 –11:30	**Keynote Speech KS-2** **Recent Research on Detection of Vulnerable Plaque in Virtual Histology Intravascular Ultrasound Images** **Prof. Ali Selamat** **Dean, Malaysia Japan International Institute of Technology (MJIIT), Universiti Teknologi Malaysia** **Main Hall**		
11:30 –12:00	**BREAK**		
12:00 –13:00	**Keynote Speech KS-3** **African Radio Astronomy Research in SKA Era - Advances and Prospects** **Prof. James Chibueze** **Centre for Space Research, Potchefstroom Campus Potchefstroom- North-West University, South Africa** **Main Hall**		
13:00-13:30	**Prayers BREAK**		
13:30 –15:00	**Session_C3** Deep Learning and its applications in Communication Systems	**Session_D3** Optical and Photonic Devices-II	
	Room (A)	**Room (B)**	
15:00 –16:30	**Session_K1** Biomedical Applications	**Session_B3** New trends in the Design of Antenna Arrays-II	**Session_C4** Mobile Communications and Radar Systems
	Room (A)	**Room (B)**	**Room (C)**
16:30 –17:30	**LUNCH**		

Thursday, June 1st, 2023

<table>
<tr><td>9:00 –11:00</td><td>Postgraduate Session-I (RECENT TRENDS IN VEHICULAR TECHNOLOGY) Room (A) (In cooperation with Vehicular Technology IEEE Egyptian Chapter)</td><td>Postgraduate Session-II (Photonics Application) Room (B)</td><td rowspan="5">Students Activity
Undergraduate Poster Session
Posters Hall</td></tr>
<tr><td>11:00 –12:00</td><td colspan="2">Keynote Speech KS-4

Future Trends in Modern Antenna Systems Research and Applications for Communications and for Sensors

Prof. Yahia Antar, Fellow IEEE
Canada Research Chair in Electromagnetic Engineering,
IEEE Fellow, IEEE AP-S Distinguished Lecturer
Professor, Former President of IEEE AP,
Royal Military College of Canada & Queen’s University Canada

Main Hall</td></tr>
<tr><td>12:00-12:30</td><td colspan="2">Break</td></tr>
<tr><td>12:30-13:30</td><td colspan="2">Keynote Speech KS-5

Innovation Echo System in Egypt
Prof. Diaa Khalil,
Faculty of Engineering Ain Shams University
CEO of the Innovator Support Fund ISF, MOHESR, Egypt

Main Hall</td></tr>
<tr><td>13:30-14:00</td><td colspan="3">Prayers Break</td></tr>
<tr><td>14:00-15:30</td><td colspan="3">Industrial Session:

“Open Radio Access Network: Potential Opportunities and Challenges
(In cooperation with Vehicular Technology IEEE Egyptian Chapter)</td></tr>
<tr><td>15:30 –17:00</td><td colspan="3">Best Paper and Best Student Awards
Closing Ceremony
Main Hall</td></tr>
<tr><td>17:00- 18:00</td><td colspan="3">LUNCH</td></tr>
</table>

NRSC'2023 Detailed Technical Program

Tuesday, May 30th, 2023

10:00-11:30

Opening Ceremony

OPENING CEREMONY

12:00-13:00

Keynote Speech KS-1

DISRUPTING THE PHOTONICS DOMAIN THROUGH PARADIGM-SHIFTING COMPUTATIONAL MODELS

Prof. Salah Obayya

UNESCO Chair, Fellow IEEE, OSA, SPIE, AAS, ACES, HEA, IEE, IOP
Honorary Chair Professor of Photonics, The University of Nottingham
Professor & Director of Center for Photonics and Smart Materials (CPSM)
Zewail City of Science and Technology, Egypt

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Chair: Prof. Said El-Khamy
Co-Chair: Prof. Mustafa Hussein

13:30-15:00

Technical sessions

COMMUNICATION AND RADIO SCIENCES IN EGYPT: A FUTURE VISION

Chair: Prof. Said El-Khamy
Co-Chair: Prof. Hadia El-Hennawy

13:30-15:00

Session_D1

ELECTRONIC DEVICES FOR COMMUNICATIONS

Chair: Prof. Imbaby I. Mahmoud
Co-Chair: Dr. Hesham Hamdy

Inv1 **AI Based Fault Tolerant Approach for I&C Systems**

Imbaby I. Mahmoud

D1 **FPGA-Based Modified Ring Oscillator Physical Unclonable Function for Internet of Vehicles**
Mariam A. Hamza, Hanady H. Issa, Saleh Eisa

D2 **3-6 GHZ Broadband High-Efficiency Power Amplifier for Multi-Standard Wireless Communication Systems**
Ahmed S. Sayed, Mohammad Darwish, Hesham N. Ahmed

D3 **Triple Band Low Noise Amplifier Design for Wireless Applications**
Hossam Sabry Tork

D4 **Designing of Fractional Order Legendre Filter using Optimization Techniques**
Andrew Amgad, A. M. AbdelAty, Hazem A. Attia, Menna T. M. M. Elbarawy

15:00-16:30

Session_B1

ANTENNA DESIGN

Chair: Prof. Mohamed Abu Eldahab
Co-Chair: Prof. Saber Zainud-Deen

Inv2 **Time-Modulated Linear and Planar Frequency Diverse Array for Multi-Target Detection**
Saber Zainud-Deen

B1 **A New Compact Circular Patch Antenna for Wide-Band RF Energy Harvesting Systems**
Sherif Hekal, Mona Hassan, Gehan Samy, and Lotfi Rabeh Gomaa

B2 **Dual-beam Conformal Hologram Meta-surface Leaky Wave Antenna Based on Surface Impedance Modulation**
Nermeen A. Eltersy, Hend A. Malhat, and Saber H. Zainud-Deen

B3 **PLASMA-Based Intelligent Omni-Surfaces**
Esraa A. El-Refay, Hend A. Malhat, Saber H. Zainud-Deen, and Mona M. Badawy

15:00-16:30

Session_C1

SIGNAL PROCESSING

Chair: Prof. Elsayed Mustafa,
Co-Chair: Prof. Ehab Badran,

C1 **A New Computationally Efficient Approach for High-Resolution DOA Estimation of Wideband Signals Using Compressive Sensing**
Said E. El-Khamy, Ahmed M. El-Shazly, and Ahmed S. Eltrass

C2 **A Simplified technique for the design of Double Density Wavelets with Enhanced Denoising Applications**
Gamal Fahmy, Mamdouh F. Fahmy, and Omar Fahmy

C3 **Face Image Synthesis from Speech Using Conditional Generative Adversarial Network**
Shaimaa Tarek Abdeen, Mohamed Waleed Fakhr, Neveen I. Ghali, and Mohamed Mostafa Fouad

C4 **Matched Wavelet Pooling for Efficient Light-Weight CNN Network Architectures with Application to Image Classification**
Said El-Khamy, Ahmad Al-Kabbany, Shimaa El-Bana, and Hassan El-Raggal

16:30-18:00

WIRS Session

WOMEN IN URSI

RADIO SCIENCE EDUCATION:

CHALLENGES AND FUTURE WIRS PERSPECTIVES

Panelist: Prof. Taysser Abouelnasr Prof. Hoda Barka, Prof. Reem Bahgat, Prof. Mona Hella, and Prof. Sherine Moharram

Chair: Prof. Hadia El_Hennawy

Co-Chair: Prof. Rowayda Sadek

Wednesday, May 31th, 2023

9:00-10:30

Session_B2

NEW TRENDS IN THE DESIGN OF ANTENNA ARRAYS (I)

Chair: Prof. Hamdy El-Mikati

Co-Chair: Prof. Mahmoud A. Abdalla

Inv3 **New Trends in Wearable Antennas for Biomedical Applications**

Mahmoud A. Abdalla

B4 **Reconfigurable Radiation Pattern of Yagi-Uda Array Based on Graphene Patch Sectors**
Sarah I. Elgiddawy, Hend A. Malhat, Saber H. Zainud-Deen, Hisham Hamed, and Ahmed A. Ibrahim

B5 **Wideband Microwave Phase Shift Measurement Technique**
Dina A. Abd El-Aziz, Abd-Elhalem Zekry, Rasha S. M. Ali , and Ahmed M. Attiya

B6 **High Gain Wideband Non-Uniform Ku-Band Array Antenna**
Ibrahim S. Mohamed, Ahmed M. Abdelraheem, and Mahmoud A. Abdalla

9:00-10:30

Session_C2

IoT Systems and Security

Chair: Prof., Rowayda Sadek,
Co-Chair: Dr. Saleh Essa,

C5 **Detecting And Preventing for Performance Assessment of IoT Devices Under DODAG Information Solicitation (DIS) Attacks**
Tamer Kamal, Emadeldin Helmy, Sherif Fahmy, and Mohamed H Abd EL-Azeem

C6 **FSO Channel Modeling and Performance Evaluation over Dust Combined With G-G Atmospheric Turbulence**
Passant H. Mohamed, Mohamed A. El-Shimy, Hossam M. H. Shalaby, Hassan N. Kheirallah

C7 **An Optimized Wireless Video Transmission in a Smart Agricultural Solutions**
Mohamed Naeem, and Mohamed Aboul-Dahab

9:00-10:30

Session_D2

Optical and Photonic Devices- I

Chair: Prof., Salah Obayya
Co-Chair: Dr. Mohamed Abaza,

D5 **Multifunctional Plasmonic Tellurite Photonic Crystal Fiber Polarization Splitter at Telecommunication Wavelengths**
Esam A. A. Hagras, Mohamed Farhat O. Hameed, Ahmed M. Heikal, Jala m. El-Azab, Adel M. El-Nozahi, Salah. S. A. Obayya

D6 **S-Matrix Analysis of Dense Wave-Division Demultiplexer Based on Add/Drop Ring Resonators Structures**
Mohamed Abdelsalam Mansour, Rabab A. Shalaby Abdelrahman Nasser, Kareem Owis, Hussein Kotb, Haitham Omran, Diaa Khalil

D7 **Performance Parameters Extraction of X-Ray Nanowire Photoconductor Detecto**
A. Ellakany, A. Zekry, M. Abouelatta, A. Shaker, and M. ElBanna

D8 **Meta-Surface Structure for Polarization Control Based on Malus Law**
Amr Elkady, Mohamed F. Hagag, Osama M. Helal, and Mahmoud A.Abdalla

10:30-11:30

Keynote Speech KS-2

RECENT RESEARCH ON DETECTION OF VULNERABLE PLAQUE IN VIRTUAL HISTOLOGY INTRAVASCULAR ULTRASOUND IMAGES

Prof. Ali Salamat

Dean, Malaysia Japan International Institute of Technology (MJIIT)
Universiti Teknologi Malaysia

Chair: Prof. Khaled Shehata
Co-Chair: Prof. Ahmed Madian,

12:00-13:00

Keynote Speech KS-3

AFRICAN RADIO ASTRONOMY RESEARCH IN SKA ERA - ADVANCES AND PROSPECTS

Prof. James Okwe Chibueze

Centre for Space Research, Potchefstroom Campus
Potchefstroom- North-West University, South Africa

Chair: Prof. El-Sayed El-Rabaie

13:30-15:00

Session_C3
Chair: Prof. Hesham El-Badawy
Co-Chair: Prof. Rowayda Sadek

DEEP LEARNING AND ITS APPLICATIONS IN COMMUNICATION SYSTEMS

Co-Chair: Dr. Mohamed Darwish,

C8 **Performance Analysis of IDS_MDL Algorithm to Predict Intrusion Detection for IoT Applications**
Walaa Adel Mahmoud, Mohamad Fathi, Rowayda Sadek, and Hesham El-Badawy

C9 **Stress Detection in The Wild: on the Impact of Cross-Training on Mental State Detection**
Mona Mamdouh, Rojaina Mahmoud, Omneya Attallah, and Ahmad Al-Kabbany

C10 **Deep Learning-Aided Channel Estimation for Universal Filtered Multi-Carrier Systems**
Mohab M. Youssef, Michael Ibrahim, and Bassant Abdelhamid

C11 **Network Intrusion Detection CNN Model for Realistic Network Attacks based on Network Traffic Classification**
Alla Abd El-Rady, Heba Osman, Rowayda Sadek, and Hesham El-Badawy.

13:30-15:00

Session_D3

OPTICAL AND PHOTONIC DEVICES- II

Chair: Prof. Mustafa Hussein

Co-Chair: Prof. Hanady Issa

15:00-16:30

D9 **Performance Analysis and Comparative Studies of Carrier-less Amplitude and Phase Modulation for Visible Light Communication**
Waleed M. Ahmed, Omar A .M .Aly, and Elsayed E.M .Khaled

D10 **Design of Step Pyramidal Nanoparticle for Plasmonic Photovoltaics**
Heba M. Yassin, Ezzeldin A. Soliman, and Yasser M. El-Batawy

D11 **End of Life Management of Solar Panels**
E. El-fayome, M. A. Abdelhamed, A. EL-Shazly, M. Abouelatta, A. Zekry

D12 **Optical Electrical Modeling of Band Gap Tunable Triple Cation Perovskite**
Karim Sewilam, Mostafa Fedawy, and Hesham Aly

Session_K1

BIOMEDICAL APPLICATIONS

Chair: Prof. Mohamed El-Mahalawy

Co-Chair: Prof. Safa Gaser

K1 **Sensor-Based Traffic System with Pedestrians in Mind**
Ahmed A. Gomaa, and Satya Prattipati

K2 **Software Solution for Three-dimensional Dynamic Contrast-enhanced Ultrasound Imaging using Pulse Inversion Spectral Deconvolution**
Mawia Khairalseed, and Kenneth Hoyt

K3 **Efficient Block-Sparse Signal Recovery with Application to ECG Compression**
Michael Melek

K4 **Microwave Imaging System for Breast Cancer Detection Using MERIT Toolbox**
Sherif Hekal, Fady E. Asaad, H. M. Mansour, and Gehan S.Shehata

15:00-16:30

Session_B3

NEW TRENDS IN THE DESIGN OF ANTENNA ARRAYS (II)

Chair: Prof. Ahmed Attiya
Co-Chair: Prof. Mahmoud Abduallah

B7 **Circularly-Polarized Phased Array Based on Reconfigurable Plasma Material Without Phasing Network in Near/Far Field Regions**
Mona M. Badawy, Saber H. Zainud-Deen, and Hend A. Malhat

B8 **Three-Phases Intelligent Reflect-Array Antenna Using Liquid-Flow Control for Sub-6 Ghz 5G Communications**
Saber H. Zainud-Deen , Hend A. Malhat , Esraa A. El-Refay, and Mona M. Badawy

B9 **Analysis of Periodic Waveguide Excitation with Arbitrary Shaped Corrugation**
Mohammed Salem, Hanna Kirolous, and Tamer Abuelfadl

15:00-16:30

Session_C4

MOBILE COMMUNICATIONS AND RADAR SYSTEMS

Chair: Prof. Hesham El-Badawy
Co-Chair: Dr. Mohamed Darwish

C12 **An Optimized Frequency Plan Algorithm for Non- Geostationary Constellations Using Linear Programming**
Mohamed A. Mandour, Ahmed A. Abdel Hafez, Islam A. El-Madah, and Hoda K. Mohamed

C13 **B5G/6G Network Planning for Study Case in Knowledge City Area as Model for Smart Cities**
Hesham El-Badawy, Hend Adel, Saber H. Zainud-Deen, and Hend A. Malhat

C14 **A Proposed Technique for Improving SNR in Pulse Compression Radars**
Alaa G. Zahra1, Ahmed Youssef, Fathy Ahmed, and Wael Mehany

Thursday, June 1st, 2023

9:00-11:00

Session PG_VTS-W

POSTGRADUATE WORKSHOP- I
(RECENT TRENDS IN VEHICULAR TECHNOLOGY VEHICULAR TECHNOLOGY)
(In cooperation with Vehicular Technology IEEE Egyptian Chapter)

Chair: Prof. Said El-Khamy
Co-Chair: Prof. Hesham El-Badawy and Prof. Rowayda Sadek

WVT1 **VLC optimization for 6G deployment**
Sara Farid, Mona Saleh, Salwa Elramly, and Hesham Elbadawy

WVT2 **Enhancement of Deploying Index Modulation**
Mariam El Hussien, Hadia El Hennawy, Bassant Abd El Hamid, Mehaseb Ahmed, and Hesham El-Badawy

WVT3 **Deployment of Federated Learning Approaches for 6G Networks**
Ahmed El-Masry, Hadia El Hennawy, Michel Ibrahim, Mehaseb Ahmed, and Hesham El-Badawy

WVT4 **Deep learning deployment for massive MIMO optimization over IRS channel modeling for 6G**
Amina Hawary, Hadia El Hennawy, Bassant Abd El Hamid, Sherif Eldaysty, and Hesham El-Badawy

WVT5 **Handover management in B5G/6G heterogeneous network**
Maryhan Mohamed, Abd El-Hady Ammar, Reem Hamed, and Hesham El-Badawy

WVT6 **MEC and Its Performance Enhancements for 6G Networks**
Rasha Samir, Hadia El Hennawy, and Hesham El-Badawy

9:00-11:00

Session PG_PA-W

POSTGRADUATE WORKSHOP -II
(PHOTONIC APPLICATIONS)

Chair: Prof. Salah Obayya
Co-Chair: Dr. Mohamed Abaza

WP1 **RL-based Dispersion Enhancement of PCFs**
Mohamed G. Mahmoud, Mohamed Farhat O. Hameed, and Salah Obayya

WP2 **Characterization of Si-based Nanowire Solar Cells with Crescent Nanohole**
Awad Khaled, Mohamed Farhat O. Hameed, B. M. A. Rahman, K. T. V. Grattan, Salah Obayya and Mohamed Hussien

WP3 **Optimization of Electro-optic Logic Gate based on Ring Resonators**
Amr A. El-Kot, Ola El-Bohghdady, Mariam H. Ibrahim, Mohamed G. Mahmoud, Mohamed Farhat O. Hameed, and Salah Obayya

WP4 **Mid-Infrared SPR Optical Fiber Sensor for Water Pollutants Detection**
Nada Yazeed M. Dawood, B. M. Younis, Ahmed El-sayed Abd-Elkader, Mohamed Farhat O. Hameed, and Salah Obayya

11:00-12:00

Keynote Speech KS-4

FUTURE TRENDS IN MODERN ANTENNA SYSTEMS RESEARCH AND APPLICATIONS FOR COMMUNICATIONS AND FOR SENSORS

Prof. Yehia Antar
Canada Research Chair in Electromagnetic Engineering,
IEEE Fellow, IEEE AP-S Distinguished Lecturer
Professor, Former President of IEEE AP,
Royal Military College of Canada & Queen's University Canada.

Chair: Prof. Said El-Khamy
Co-Chair: Prof. Mohamed Nasr

12:30-13:30

Keynote Speech KS-5

INNOVATION ECHO SYSTEM IN EGYPT

Prof. Diaa Khalil,
Faculty of Engeering Ain Shams University
CEO of the Innovator Support Fund ISF, MOHESR, Egypt

Chair: Prof. Esmat Abdel Allah
Co-Chair: Dr. Saleh Essa

14:00-15:30

Industrial Session

(In cooperation with Vehicular Technology IEEE Egyptian Chapter)

Invited Review Papers by NRSC Committee Members:

Inv4 **Open Radio Access Networks (O-RAN): Opportunities and Challenges**

Hesham El-Badawy, Chair and Founder IEEE VT Chapter (Egypt Section)

Inv5 **Internet Of Vehicles (Iov) Security: Challenges and Open Research Issues**

Rowayda Sadek, Vice-Chair IEEE VT Chapter (Egypt Section)

Technical Talks:

I1: Open Radio Access Network Testbed Overview

Hesham Kamel,

I2: Vodafone Open Radio Access Networks: An Overview and Global Trends

Mohamed Galal,

I3: AI/ML Aspects and Applications in Open RAN and vehicular Networking

Maha Elsabrouty

Round Table Discussion:

Vehicular Technology Industry and Potential Opportunities in Egypt

Moderator: Prof Said El-Khamy

9:00-14:00

Session PS

Chair: Prof. Imbaby I. Imbabay & Prof. Daila El-Sheikh,

Co-Chair: Dr. Omar Mamdouh & Dr. Mohamed Abaza

POSTER SESSION

1- UNDERGRADUATE POSTERS

P1 **Using 5G Radio Communication for Teleoperation Fallback And Monitoring system For Level 4 Autonomous Vehicles**

Dyaa Mohamed Elabasiry, Mohamed Mahmoud Eldemellawy, Ahmed ElarabyAli, AbdallahKhaled Mohamed Ghanem, Abdulla Ahmed Ibrahim, Esraa Mahmoud Sadek, Habeba Hamada Mohammed, and Hadeer Ahmed Mahmoud

Supervised By: Prof. Said Elkhamy,

Alexandria University

P2 **Breast Cancer Detection and Monitoring System**
Habiba Essam Mohamed, Sara Ashraf Ali Abd alawy, and Zainab Wael Abdelmawgood
Supervised By: Dr. Angie R. Eldamak Dr. Dalia Nashat & Dr. Omar Fahmy
Ain Shams University

P3 **Deep Image De-raining**
Laila Hegazy
Supervised By: Dr. Shereen Moataz Afifi and Dr. Omar Mamdouh Fahmy
The German university in Cairo (GUC)

P4 **Egyptian License Plate Recognition In Vehicles And Motorcycles**
Tarteel Elattar
Supervised By: Dr. Shereen Moataz & Prof. Mohammed Abdel Megeed Salem
The German university in Cairo (GUC)

P5 **Image De-raining Enhancement Tool**
Nour Khaled ElFaramawy
Supervised By: Dr. Shereen Moataz Afifi and Dr. Omar Mamdouh Fahmy
The German university in Cairo (GUC)

P6 **A Mobile Application for Early Detection of Skin Cancer**
Bassant Tarek Abdelkader Aboulmagd
Supervised By: Dr. Shereen Moataz Afifi
The German university in Cairo (GUC)

P7 **Heterogeneous Networks Design and Optimization**
Selvia Mamdouh, Mohamed Karam, Ayman Mahmoud, Shohrt Helmy, Beshoy Alber, Thanaa Mohamed, Mokhtar Hossam, Menna Tollah, Muhammed Hossam, Mayar Mostafa, Mustafa Zaki, and Mostafa Sherif
Supervised By: Prof. Salwa El-Ramly, Prof. Hussein Abd El Atty,
Sponsored by: Omega Wireless
Ain Shams University

P8 **B5G/6G Interference Assessment System (IAS)**
Omar Ahmed El Sherif, Mohamed Ashraf Hindy, Sara Essam Kamal, Mostafa Ahmed Taha, and Hussein Mohamed El Hakim
Supervised By: Prof. Hesham El-Badawy, Dr. Mohamed Khaled Shehata
Arab Academy for Science, Technology & Maritime Transport (Cairo Campus)

P9 **Smart Building Using IoT**
El Saiid Hesham El Saiid, Mostafa Said El Sayed El Sibaie, Rahma Mohamed Mounir, and Veronya Amgad Roushdy
Supervised By: Prof. Hesham El-Badawy, Dr. Mohamed Khaled Shehata
Arab Academy for Science, Technology & Maritime Transport (Cairo Campus)

P10 **Autonomous Vehicle for IoT System Design From Car Safety Prospective**
Ahmed Nahmdo, Omar Hany, Omar Walid, and Seif Mohamed
Supervised By: Dr. Mohamed Abaza and Dr. Hesham Hamdy
Arab Academy for Science, Technology & Maritime Transport, (Smart Village Campus)

P11 **Vehicle to Everything (V2X) Based on Internet of Vehicle (IoV) Concept**
Ahmed Hazem, Ahmed Khaled, Ahmed Tarek, and Mohamed Ashraf
Supervised By: Dr. Mohamed Abaza and Dr. Hesham Hamdy
Arab Academy for Science, Technology & Maritime Transport (Smart Village Campus)

P12 **NUROB: A Nurse Robot for Improved Medical Service**
Mohamed Osama, Mohamed Khaled, Omar Osama, and Youssef Saiid
Supervised By: Dr. Hesham Hamdy and Dr. Noha El Gatwary
Arab Academy for Science, Technology & Maritime Transport (Smart Village Campus)

P13 **Multiple Access for 5G Wireless Networks Challenges and Solutions Analysis**
Abdelrahman Mohamed, Asser Abdelkarim, Taha Hosny, and Youssef Mohamed
Supervised By: Dr. Sameh Fathy
Arab Academy for Science, Technology & Maritime Transport (Smart Village Campus)

P14 **Autoencoder for monitoring bearing conditions**
Mohamed Medhat Mohamed Elbehiri Abdelfatah
Supervised By: Supervised By: Prof. Hisham Hassaballah Othman
The German university in Cairo (GUC)

P15 **Deep/ Federated Learning Algorithms for Ultrasound Breast Cancer Image Enhancement**
Sarah Mohamed Elsayed Mohamed Waly
Supervised By: Supervised By: Prof. Mohammed Abdel Megeed Mohammed Salem
The German university in Cairo (GUC)

P16 **SDN & NFV**
(Software Defined Networks & Network Function Virtualization)
Mohamed El-Gendy, Mai El-Bendary, Malak Nasser, Sally Ahmed, Sara Hesham, and Taghreed Taha
Supervised By: Prof. Adel El-Fahar
Alexandria University

2- POSTGRADUATE POSTER(S)

PG1 **Astronomical Dome Automation Based Wireless Communication**
Mohamed Ismail, Islam Helmy, Mohamed Abd El-Karim
Supervised By: Prof. Sayed Elbanna
Al-Azhar University, National Research Institute of Astronomy and Geophysics (NRIAG)

16:30-17:30

Closing Ceremony

BEST PAPER AND BEST STUDENT PAPER AWARDS

CLOSING CEREMONY