

Region 10 Karachi Section Report

PART A - SECTION SUMMARY

A.1 Executive Summary

- Section Executive Committee Member List: The Executive Committee (ExCom) has 37 members. Their names are as follows,
 - Dr. Bhawani. S. Chowdhry, Chair
 - Dr. Tariq Soomro, V. Chair
 - Dr. Asim ur Rehman Khan, Secretary
 - Engr. Moiz Rahman Memon, Treasurer
 - Dr. M. Shahid Shaikh, Past Chair
 - Dr. M. Shahab Siddiqui, Chair, MD & NIC
 - Engr. Parkash Lohana,
 - Engr. Tahir Saleem, Chair, PES
 - Dr. Syed Hayder Abbas, Chair, ComSoc
 - Dr. M. Sadiq Ali Khan, Chair Education Activities (EA)
 - Engr. Bhagwandas Lohana, Chair, CS
 - Dr. Bushra Naeem, Chair WIE
 - Engr. Atif Fareed, Chair SAC
 - Engr. Noorali Amarsi,
 - Engr. Hannan Daudpota,
 - Engr. Murtaza Hanif,
 - Engr. Mumtaz Hussain Soomro,
 - Engr. Khalid bin Muhammad,
 - Engr. Saqib Munawwar,
 - Engr. Rabeet Sagri,
 - Engr. Haris bin Ashraf, Chair, IAS
 - Rafay Shaikh, SSR
 - Engr. Ramiz Ansari, Chair, YP
 - Dr. Valiuddin Abbas,
 - Dr. Imran Majid,
 - Dr. M. Faisal Khan,
 - Engr. Imran Zafar,
 - Dr. Krishan Lal Khatri,
 - Dr. M. Ibrar ul Haq,
 - Dr. Burhan Khan,
 - Engr. Tauseef Mubeen,
 - Dr. M. Ali Memon,
 - Dr. Isma F. Siddiqui,
 - Dr. Ahmed Usman,
 - Engr. Junaid Ahmed Memon,
 - Engr. Ishtiaq ul Haq,
- Section Highlights

One AGM, 6 ExCom meetings, and 6 Officers meetings were held during the year 2020. The AGM was held physically. Two ExCom meetings and 2 Officer's meetings were also held physically. The remaining ExCom and Officer's meetings were held online due to Covid-19.

 - i) R10 POCO: An online Workshop R10 POCO (Panel of Conference Organizers) was held on November 21, 2020. The purpose of this workshop was to educate and train the personnel at various universities and other institutions who are interested in holding a National or International Conference during the next year. R10 approved an incentive of USD 250/-.
 - ii) VoLT: Volunteer Leadership Training. A volunteer training activity was held. This was attended by several volunteers from many universities of the region under Karachi Section. The activity was held online on July 25, 2020. The number of participants were 88. Among them 55 were IEEE members.
 - iii) SPAA: Students Professional Awareness Activity. This activity was held for students who are about to graduate. The activity was held online on July 26, 2020. The total number of participants were 75. The IEEE members were 45.

- Major Events (International, National)

The following international conferences were held during the year,

- i) 2nd International Conference on Information Science & Communication Technology (ICISCT) was held on February 8-9, 2020 with the collaboration of Karachi University. The conference was held online. The number of participants were 300. Roughly 100 were IEEE members.
- ii) The International Conference in Emerging Trends in Smart Technologies (ICETST) was held successfully (online) at FAST National University of Computer & Emerging Sciences (NUCES). Roughly 200 attended the Conference. A large number of IEEE members were present.

- Major Chapter Activities

Karachi Section has three Chapters: Computer Chapter (C16), Communication Chapter (COM19), and Power & Energy Chapter (PE31). The activities of these Chapters are given in the following paragraph:

- i) Computer Chapter (C16): Following activities were held
 - i. International Conference ICISCT-2020 as given above.
 - ii. DIGICON2020 held on February 10, 2020. The venue was Mehran University of Engineering and Technology. This was a physical event. The event attendance was 95. Out of this 45 were IEEE members.
 - iii. A Seminar on IoT and its Applications in day-to-day life was held on February 11, 2020. The venue was Department of Computer Science, Karachi University. This was an online activity. The participation was 55. Out of this 45 were IEEE members.
 - iv. A Hands-on Workshop was organized at Indus University on February 12, 2020. This was a physical activity. There were 70 participants, 40 were IEEE members.
 - v. A Workshop on Application of Computational Technology in Energy Industry was held at Karachi University on February 27, 2020. This was an online activity with 50 attendees. Out of this 45 were IEEE members.
 - vi. A Seminar on Natural Language Processing in Artificial Intelligence was held on March 8, 2020 at Karachi University. This was a physical event. Total attendance was 50. Out of this 45 were IEEE members.
 - vii. An International Conference based on Information Security and Communication Technology was held at Karachi University on March 9, 2020. This was a physical event. The number of participants were 200, and the IEEE members were 100.
 - viii. A Walk for Food was held at Karachi University on May 14, 2020. This was a Humanitarian activity.
 - ix. A Seminar on Modern Energy Trading Practices: An overview of different energy market algorithms and market structures was held at DHA Suffa University on June 27, 2020. This was a physical event with 110 attendees. Out of this 20 were IEEE members
 - x. A seminar on “Amazing Tricks and Tips” CV, Resume, Research proposal and cover letter was organized by Baluchistan University of Information Technology, Engineering and Management (BUITEM) on June 27, 2020. This was a virtual event with 45 participants. Out of this 35 were IEEE members.
 - xi. An online Webinar on Learn and Live with Artificial Intelligence was organized by Mehran University of Engineering and Technology on June 28, 2020. There were 45 attendees with 15 IEEE members.
 - xii. A Workshop on Ethical Hacking was organized by Karachi University on October 8, 2020. This was a physical event with 40 participants. The IEEE members were 15.
 - xiii. A Workshop on Data Science, AI and Internet of Things was organized by Computer Science Department of Karachi University on October 16, 2020. This was a physical event with 70 attendees. Out of these 30 were IEEE members.
 - xiv. A Workshop on Big Data and its Applications was organized by Qaid e Awam University, Nawabshah, Pakistan on October 24, 2020. This was a physical event with 70 attendees. Out of this 10 were IEEE members.
 - xv. A one-day Seminar on Future Technologies was held at Computer Science Department of Karachi University on October 31, 2020. This was a physical event with 125 participants. Out of this 25 were IEEE members.
- ii) Communication Chapter (COM19)

- i. A Seminar on “Scope of Communication Technology for Youth” was organized at Mehran University of Engineering and Technology on January 30, 2020. This was a physical event with 50 participants. Out of this 5 were IEEE members
 - ii. A Seminar on “Realizing Innovations in Digital Image Processing for Healthcare Applications” was arranged on February 26, 2020 at Quaid e Awan University, Nawabshah, Pakistan. This was a physical event with 54 participants. Out of this 4 were IEEE members.
 - iii. A Seminar on “Photonics and Optical Technologies” was organized at Indus University, Karachi on May 2, 2020. This was a physical event with 130 attendees. Out of this 5 were 3 IEEE members.
 - iv. A Seminar on “World Telecommunication and Information Society Day (WTISD)” was held Mehran University of Engineering and Technology on May 17, 2020. This was a physical event with 60 participants. Out of this 22 were IEEE members.
 - v. A Workshop on “Accrediting online Learning System of Higher Education Institutes under Lockdown Situation” was held at Khairpur campus of Mehran University of Engineering and Technology on July 4, 2020. The event was online with 67 participants. The IEEE members were 5.
 - vi. A Seminar on “Empowering the Fourth Industrial Revolution with Future Internet & Communication” was held on August 13, 2020. This was an online activity with 67 participants. Out of these 12 were IEEE members.
 - vii. A Seminar on Scholarship and Research Opportunities for Graduating Engineers in Telecommunication Engineering was held on August 23, 2020. The was a physical event with 85 participants. Out of these 35 were IEEE members.
 - viii. A Seminar on “Digital Transformation: Its leverage and Impact on communication” was held on September 30, 2020. This was a physical event with 42 attendees. Out of this 12 were IEEE members.
 - ix. The 4th IEEE Communication Society Karachi Section was held on October 10, 2020 at NED University of Engineering and Technology. This was a physical event with 155 participants. Out of these 20 were IEEE members.
- iii) Power & Energy Chapter (PE31)
- i. A one-day Seminar on Power Isolation was held on February 19, 2020. This was a virtual event with 50 participants. Out of this 40 were IEEE members.
 - ii. A Seminar on “Flash Electric Safety Requirement” was held on May 14, 2020. This was a virtual event with 20 attendees, out of which 20 were IEEE members.
 - iii. A Seminar on Air Insulated Medium Voltage Switchgear was organized on July 2, 2020. The event was attended by 39 participants, out of which 25 were IEEE members.
 - iv. A Webinar on “Air Insulated MV Switchgear Part 2-Advanced Details” was held on September 23, 2020. The event was held online with 25 participants including 10 IEEE members.

- Major Student and Affinity Group Activities

Karachi Section comprises of 27 Student Branches, and 3 Affinity Groups (YP, WIE, and LM). Details are given in B.5.

- Awards

The following awards were announced,

- i) Outgoing Volunteer’s awards 2020
 - i. Engr. Tahir Saleem, Chair, PES
 - ii. Dr. Bushra Naeem, Chair WIE
 - iii. Mr. Rafay Shaikh, SSR
- ii) Conference Appreciation Awards 2020
 - i. iCoMET, IBA-Sukkur, January 2020 (Dr. Ahmad Waqas)
 - ii. ICISCT, Karachi University, February 2020 (Dr. Sadiq Ali Khan)
 - iii. ICETST, NUCES, Karachi, March 2020, (Dr. Atif Tahir)
- iii) Shields and Certificates for Speakers of POCO
 - i. Dr. B. S. Chowdhry
 - ii. Dr. M. Shahab Siddiqi
 - iii. Engr. Atif Fareed

- iv. Engr. Moiz Rahman Memon
 - v. Dr. Asim ur Rehman Khan
 - vi. Dr. Tariq R. Soomro
 - vii. Dr. Sadiq Ali Khan
 - viii. Dr. S. N. Singh
- iv) Award for organizing activities during Covid-19
- i. Dr. Hyder Abbas Mousvi, Chair, ComSoc
 - ii. Engr. Tahir Saleem, Chair, PES
 - iii. Engr. Atif Fareed, Chair, SAC
 - iv. Dr. Bushra Naeem, Chair WIE
 - v. Dr. Sadiq Ali Khan, Chair EA
 - vi. Dr. Bhagwan Das Lohana, Chair CS
 - vii. Dr. M. Shahab Siddiqui, Chair MD
 - viii. Engr. Ramiz Ul Haq Ansari, Chair YP
 - ix. Dr. M. Shahid Shaikh, Conference Coordinator (for POCO)
 - x. Engr. Parkash Lohana, SIGHT Chair (for securing HAC/SIGHT COVID-19 grant of USD 4,800)
 - xi. Dr. Faisal Khan, Chair, Quetta Subsection
- v) Best Student Branch Award
- Best Student Branch awards goes to Sir Syed UET. A shield is awarded to them for organizing 73 events during the year.
- vi) Best Student Branch Chair Award 2020
- Best Student Branch Chair Award goes to Engr. Abdul Rehman Jabri, Chair, PAF KIET SB
- vii) Student Branch & Branch Counselor Appreciation Award goes to
- i. SSUET – Tauseef Mubeen
 - ii. PAF KIET - Dr. Sameer Qazi
 - iii. SZABIST HYD – Naeem Akbar Channar
 - iv. MUET – Dr. Irfan Halepoto
 - v. JUW – Dr. Shahab Siddiqui
 - vi. UIT – Engr. Atif Fareed
 - vii. NEDUET – Dr. Kashan
 - viii. BUIITEMS – Dr. Bushra Naeem
- viii) SAC Team Members Award 2020 goes to
- i. M. Rafay Shaikh (SSR)
 - ii. Ms.Fabeha Raheel (Project Coordinator)
 - iii. Moiz Hassan (Project Coordinator)
 - iv. Anas Bin Sohail (Vtools Coordinator)
 - v. Ali Ahmad (Graphic Designer)
 - vi. Ayesha Saeed (WIE Coordinator)
 - vii. Sufiyan Khanzadah (Web Master)
- ix) Guest of Honor Award
- The Guest of Honor Award goes to Engr. Mukesh Kumar, Provincial Head, MEDA, Sindh

A.2 Financial Report

- Summary (as per submitted on NetSuite)

Title: CBRS ANNUAL REPORT FOR IEEE Karachi Section
 For THE CALENDAR 2020
 YEAR OF
 Account: 100809
 Currency: USD
 Opening Balance: 40534.8
 Closing Balance: 56677.34

<u>Date</u>	<u>Amount</u>	<u>Additional Information</u>
1-Jan-20	42.76	Interest Paid
3-Jan-20	427	WT SEQ#52779 WF RETURN WIRES IN PROC ORG=- , SRF#,2020010300017171 TRN#200103052779 RFB# Sukkur IBA University
7-Jan-20	1,000.00	f0322 - 2019 R10 Humanitarian Challenge (TENHUMCH) - transfer from Region 10 - GBENEDIC
13-Jan-20	-278	WT FED#06120 NATIONAL BANK OF P FTR- BNF=Association for Water Applied- , SRF#,GW00000030505550 TRN#200113066536 RFB# 51165
13-Jan-20	-140	WT FED#06137 BANK AL HABIB LIMI FTR-BNF=Atif Fareed-, SRF#,GW00000030505559 TRN#200113067651 RFB# 51166
13-Jan-20	-124	WT FED#06320 HABIB BANK LIMITED FTR-BNF=Bushra Naeem-, SRF#,GW00000030505390 TRN#200113068040 RFB# 51167
20-Jan-20	2,050.00	xx24 - R10 2019 Section Incentive and/or Strategic Planning Survey Incentive grants - GBENEDIC
1-Feb-20	43.76	Interest Paid
19-Feb-20	-1,405.00	AR invoice
1-Mar-20	41.36	Interest Paid
6-Mar-20	-118	WT FED#08316 BANK AL HABIB LIMI FTR-BNF=Tahir Saleem-, SRF#,GW00000031778937 TRN#200306082811 RFB# 51993
6-Mar-20	-152	WT FED#08278 BANK AL HABIB LIMI FTR-BNF=Atif Fareed-, SRF#,GW00000031778923 TRN#200306082602 RFB# 51992
6-Mar-20	-454	WT FED#07879 ALLIED BANK OF PAK FTR-BNF=Sukkur IBA University-IEEE PSYWSC- , SRF#,GW00000031779092 TRN#200306082265 RFB# 51990
-Mar-20	-1,000.00	WT FED#08183 BANK AL HABIB LIMI FTR-BNF=Syed Sammak Hussain-, SRF#,GW00000031779040 TRN#200306081752 RFB# 51988
1-Apr-20	29.76	Interest Paid
1-May-20	24.63	Interest Paid
1-Jun-20	22.37	Interest Paid
15-Jun-20	5,284.60	Karachi Section 2020 IEEE MGA SECTION REBATE- TGALLO
01-JUL-20	21.03	Interest Paid
21-Jul-20	280	Karachi Section 2020 IEEE MGA Student Branch Rebates-4 STB- TGALLO
01-AUG-20	21.47	Interest Paid
1-Sep-20	19.6	Interest Paid
1-Oct-20	18.22	Interest Paid
1-Nov-20	17.65	Interest Paid
1-Dec-20	16.33	Interest Paid
1-Dec-20	-1,675.00	Unbilled TCS Invoice 47524

2-Dec-20	3,528.00	HAC/SIGHT COV Proj 20-COV-150 PAK SCIENCE, MUHAMMAD ASAD KHAN, masadkhan@ieee.org - BTOLAND
3-Dec-20	500	g0049 - 2020 Region 10 Individual Benefit Services Awards - GBENEDIC
4-Dec-20	300	g0110 - Region 10 Reaching Locals Project - GBENEDIC
7-Dec-20	4,800.00	HAC/SIGHT COV Proj 20-COV-130 Prov Ess WASH Serv - Parkash Lohana, parkash@ieee.org- BTOLAND
09-DEC-20	3,000.00	g0072 - Region 10 2020 Section Activity Incentive - GBENEDIC

- Any other financial activities

No.

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

- Total number of active members in the past 3 years.

Following is the statistics for the last 3-years. This is he combined numbers including all categories

- i) December 2018: 724
- ii) December 2019: 534
- iii) December 2020: 391
- iv) January 2021: 410

- Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members.

At the start of year 2020, for the first time in IEEE Karachi Section we created a 8-membered Membership Development Committee. Each of the IEEE Professional entity of the Section was represented in the committee headed by Prof. Dr. Muhammad Shahab Siddiqui. During the year, we suffered a great loss in IEEE Student Membership due to Pandemic and University Lockdowns. Though from June 2020, we switched to webinars and activated our IEEE Student Branches for the activities and assigned each of our MD Committee member, task to give a 5-minutes IEEE MD Presentation for member benefits. Also, in the meantime we prepared a proposal for R10 IBS Proposal Call and after the Section ExCom Approval we submitted it to R10 and get 2nd Rank and USD 500 as a Grant to implement this IBS Proposal in 2021 cycle. In September, I represented IEEE Karachi Section in IEEE MD Webcast and highlighted the ups and down of Section. In October, we attended a Series of MD Training. In December, with the announcement of FUTURE50 offer for IEEE Student Members for joining and renewing get an impact and the membership is nearly doubled from 75 to 144 or so. On February 10, 2021 Section Membership is 429 and it has 170 Students, 158 members, 60 GSMs, 32 Senior Members, 5 Associates, 3 Affiliates and 1 Life Member.

B.2 Chapter Activities

- Total number of Chapters in the Section

Karachi Section has three Chapters as given below

- i) Computer
- ii) Communication
- iii) Power and Energy

- Number of Chapters in the current year

The above number of Chapters shall continue. It is expected that one or two more chapters shall be initiated in the current year (2021).

- Number of active Chapters (Chapters who have reported required number of meetings during the year)

All three Chapters are active and meet the minimum requirements of activities.

- Summary of Chapter activities (Chapter wise with attachment table/information)

Due to Covid-19, the Chapters performed limited number of physical activities, and several online activities. There were sizable number of participants in both type of activities. A large number of IEEE members also attended these activities. Details of Chapter Activities have been given in A.1 above.

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information.

The professional and continued education activities are maintained by YP for fresh graduates, by WIE for women engineers, and by various seminar, conferences under the three chapters (Computer, Communications, and Power & Energy) for professional. The details of these activities are given in other sections.

B.4 Students Activities

- Total number of Student Branches in the Section: 27
- Number of Student Branches formed in the current year: Nil
- Section level student activities (student congress, paper and other contests, awards, etc.):
 - One-day activity VoLT (Volunteer Leadership Training) on July 25, 2020
 - One-day activity SPAA (Student Professional Awareness Activity) on July 26, 2020.
- Number of active Student Branches (Student Branches who have reported required number of meetings during the year): 12
- Summary of Student Branch activities (Student Branch wise with attachment table/information)

Event Title	Event Date	Organizational Unit*	Number of Attendance	IEEE Member Attendees
3rd ExCom Meeting	12/20/2020	KIET	18	8
Join IEEE to become an Effective Professional	12/19/2020	HIET	39	35
Social Media Marketing	12/5/2020	KIET	170	20
"Image Processing with Computer Vision"	11/28/2020	KIET	213	15
An Overview of Agile Project Management for FYPs	11/19/2020	KIET	50	5
Webinar On "Career Counselling"	10/23/2020	IoBM	21	11
Innovation: From Design to Product	10/16/2020	KIET	139	10
Value of IEEE Member in Professional Life	10/15/2020	KIET	139	10
"IEEE and its Role in an Engineer's Life"	10/14/2020	KIET	139	10
IEEE Day 2020 Celebration	10/14/2020	IoBM	43	13
Facial Recognition - An Application of Pattern Recognition	9/17/2020	KIET	199	15
Basic of Instrumentation and Control System	9/12/2020	KIET	177	15
Your Career Path to Cloud Computing	8/22/2020	U. of Karachi	32	6
Robust adaptive control design for heart rate regulation during rhythmic exercises	8/17/2020	KIET	119	8
Technical Webinar: System Engineering Design of Strategic and Non-Strategic Machine Tools as applicable to Electrical and Electronics Engineers	7/31/2020	KIET	179	8
Technical Webinar: Application of Nature-Inspired Algorithms to Wind Farm Layout Design	7/30/2020	KIET	150	8

Technical Webinar: Emerging Trends in the Field of Solar Cell Fabrication	7/27/2020	KIET	103	5
Research Essentials: Characteristics of a Good Literature Review	7/25/2020	KIET	156	8
Technical Webinar: Introduction to High-Performance Computing using CUDA	7/24/2020	KIET	159	15
Professional Webinar: Guideline for Job Interviews & various assessments conducted by employers	7/22/2020	KIET	163	15
Ensemble Learning and its Applications	7/21/2020	KIET	116	6
Technical Webinar: Overview of Deep Learning in Bioinformatics	7/20/2020	KIET	153	6
Distribution Control System	7/19/2020	Dawood UET	60	15
Webinar: A Shift to Digital Learning - a 'COVID-19' Dilemma	7/16/2020	KIET	190	10
Webinar: COVID-19- Persisting Commercial Crisis Urging Diverse Commercial Paradigm Shifts	7/11/2020	KIET	65	5
Technical Webinar: The realm of light-emitting diodes	7/9/2020	KIET	44	7
Webinar on A Brief Introduction to Classification and its Industry Applications	7/9/2020	IoBM	36	11
Webinar: Role and Use Cases of Internet of Things during COVID-19	7/8/2020	KIET	42	7
Online Workshop: Mastering Arduino	6/21/2020	KIET	102	12
Webinar: Life Beyond Graduation	6/20/2020	KIET	80	20
Webinar: Introduction to Computer Vision	6/19/2020	KIET	105	15
Lets Emerge with IEEE	6/14/2020	Sir Syed UET	26	26
Webinar: How to Introduce Yourself to the World	6/8/2020	KIET	57	9
IEEE JUW Student Branch Virtual Admin Meeting	6/8/2020	Jinnah U. for Women	4	4
Webinar: You, Me & IEEE	6/2/2020	KIET	62	7
Second Virtual ExCom Meeting	5/31/2020	KIET	12	6
First Virtual ExCom Meeting	5/20/2020	KIET	5	5
Automation with PLC and HMI:	5/19/2020	Dawood UET	923	17
Webinar: Automation with PLC and HMI	5/19/2020	KIET	32	5
Industrial Control and switching Devices and Applications	5/17/2020	Dawood UET	67	17
Connecting dots: IEEE and your fields	5/14/2020	Mehran UET	70	30
IEEE MUET Student Branch Get Together	5/13/2020	Mehran UET	60	30
Certified Webinar on Python Programming:	5/11/2020	Dawood UET	38	15
Energy Management System	5/5/2020	Dawood UET	76	18
Campus to Corporate	5/2/2020	Dawood UET	30	16
Exploring IEEE Student Membership Benefits	4/27/2020	Dawood UET	755	17
Time Crunch: A Webinar on How to Study Effectively Online	4/19/2020	KIET	35	5
Discovering IEEE_WIE and Women Career In STEM.	4/18/2020	Sir Syed UET	40	15
Interviews for induction	2/18/2020	NUCES-Karachi	n/a	n/a
Air Show and Aero Build & Fly Competition	2/16/2020	KIET	1000	1000

Line Following Robot Competition	2/15/2020	KIET	45	5
National Flying Competitions 2020	2/14/2020	KIET	2040	2000
WHY PHY 4.0	2/13/2020	IoBM	171	11
Robotics Workshop: Advanced Line Following Robots	2/8/2020	KIET	18	4

* The detail of abbreviation is given in Glossary at the end.

B.5 Affinity Group Activities

- Young Professional (YP)

Event Title	Event Date	Number of Attendance	IEEE Member Attendees
Technical Webinar: Introduction to Micro-services Architecture	10/28/2020	33	10
Webinar: Research and Innovation: Key factors to lead the smart world	10/16/2020	105	45
Webinar: Life Beyond Graduation	6/20/2020	60	20
Humanitarian Activities: Experiences and Opportunities toward ICT4SDG	6/11/2020	38	30
Online Webinar: Research Project and Grant Proposals	6/4/2020	45	40
ExCom Meeting IEEE YP Karachi	3/29/2020	4	4
ExCom Meeting IEEE YP Karachi	1/25/2020	2	2

- Women In Engineering (WIE)

Event Title	Event Date	Number of Attendance	IEEE Member Attendees
Why is Cyber Security important for Industrial IOT?	12/5/2020	101	25
Promoting anti-harassment law for women in higher education institutions	11/20/2020	50	10
1st International Symposium on Building Economic Resilience against Pandemics	10/27/2020	170	20
Webinar: Research and Innovation: Key factors to lead the smart world	10/16/2020	105	45
Opportunities for Women in Tech	10/16/2020	93	23
IEEE Quetta Subsection Inauguration Ceremony	7/14/2020	40	15
DevOps and Micro services Architecture – Better Together	7/2/2020	68	12
Learn & Live with Artificial Intelligence	6/28/2020	55	40
WIE Volunteer Training	6/28/2020	83	33
Amazing Tricks and Tips: CV, Resume, Research proposal and Cover Letter	6/27/2020	89	70
Learn and live with Artificial Intelligence	6/26/2020	125	43
Amazing Tips & Tricks; Drafting Impactful Cover Letter, CV and Research Proposal for Students and Professionals	6/26/2020	60	15
WIE AG meeting	6/26/2020	n/a	n/a

Celebrate International Women in Engineering day with Female Scholars and Researchers Abroad!	6/23/2020	36	25
IEEE WIE Affinity Group Karachi Section Ex-Com Meeting	6/7/2020	5	5
Discover IEEE-WIE with Karachi Section, WIE AG	4/18/2020	6	6
ExCom Meeting	3/5/2020	4	4
Formation of IEEE Quetta Subsection	2/5/2020	n/a	n/a

- Life Member (LM)

Karachi Section has only one LM member. No event was planned during the year.

B.6 Awards & Recognition Activities

- Award constituted by the Section

The following awards have been constituted by the Section

- Outgoing Volunteer's awards 2020
 - Conference Appreciation Awards 2020
 - Shields and Certificates for Speakers of POCO
 - Award for organizing activities during Covid-19
 - Best Student Branch Award
 - Best Student Branch Chair Award 2020
 - Student Branch & Branch Counselor Appreciation Award
 - SAC Team Members Award 2020
 - Guest of Honor Award
- Please list all Awards and Recognitions received by the Section, and members in the Section, from R 10 and IEEE HQ during the year,
 - Dr. Tariq R. Soomro was nominated Distinguished Speaker in Computer Science.
 - Engr. Parkash Lohana, SIGHT Chair secured HAC/SIGHT Covid-19 grant of USD 4,800
 - A member of IEEE ExCom of Karachi Section, Engr. Parkash Lohana has been appointed Chair R10 Professional Activities Committee (PAC) for 2021-2022.

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

- Newsletter (name and number of issues in the year)

Karachi Section published one Newsletter in October 2020. It covered all activities during November 2019 through October 2020.

- Home Page of the Section (give the URL and how often it is updated)

The Section maintains a web site: <http://www.ieekhi.com>

- Other means of contacts with Section members including social media

Several ExCom members are also members of other professional bodies. They promote IEEE during the activities organized by these bodies. Besides, several members maintain their personal accounts in Facebook, LinkedIn, Tweeter, and other social media platforms. They promote IEEE through them.

B.8 Industry Relations

- Membership growth and retention

Membership growth and retention is the biggest challenge to our Section. This is especially critical due to retention of Student members. Due to Covid-19, most of the universities were forced to switchover to online teaching during most of 2020. This resulted in very few physical activities. This will affect membership in universities. The number of jobs has also reduced due to Covid-19. As a result, retention of the professional membership would need extra effort during 2021.

- Activities for/with industrial members

The three chapters of Karachi Section (Computer, Communication, Power & Energy) hold several technical seminars during 2020. The Computer chapter holds an annual conference. A large number of

professional attended these events. A sizable number of professional engineers attend these events. IEEE introduction is a regular activity during these events. As a result, they are appraised by the achievements, and the opportunities associated with IEEE membership

B.9 Humanitarian Technology Activities

- Humanitarian Technology related activities supported by the Section including collaboration with other OUs.

Engr. Parkash Lohana, SIGHT Chair secured HAC/SIGHT Covid-19 grant of USD 4,800

- SIGHT Activities

Engr. Parkash Lohana, SIGHT Chair secured HAC/SIGHT Covid-19 grant of USD 4,800

B.10 Community Activities

- IEEE Social activities (Family day, IEEE day, Engineers Week)”
 - i) Engineers Week was observed during July 12-18, 2020
 - ii) IEEE day was observed on October 16, 2020 with a Seminar on “Technology Awareness Program (TAP). This was attended by 50 persons. Out of these 38 were IEEE members.
 - iii) IEEE day was observed with a Seminar by WIE of Karachi Section, and WIE of Quetta Subsection. The title of the seminar was “Opportunities for Women in Tech – Career and Education” observed on 16 October, 2020.

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved

Special events are important to address issues that are normally overlooked. These may include training of personnel to an unusual situation like disaster, health-related issues, etc. Karachi Section helped deploying a Solar based water pumping station at the remote location in interior Sindh. This helped the villagers to extract water from ground during the long shutdown time of regular electricity.

- Funding secured from the IEEE and external sources including sponsorships

The following funding was received from R10, IEEE

- i) USD 250/- received for holding R10 POCO (Panel of Conference Organizers)
- ii) USD 3000/- received for incentive
- iii) USD 4,800/- received for Humanitarian activity
- iv) USD 300/- received for promoting IEEE Field of Interest in local languages (Urdu and Sindhi)

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed

Karachi Section invited the Regional Head of SMEDA (Small and Medium Enterprise Development Authority), under the Government of Sindh. The understanding of a joint collaboration has reached during the year. A formal agreement is expected to be signed during 2021.

- Details of joint activities

As per planned agreement, SMEDA will provide proposals for viable solutions, and Karachi Section will provide technical support through Seminars, and through a panel of consultants.

- Benefit to IEEE members (for example discounts, access to technical information etc.)

The above activity will help in increased IEEE membership from industry, access to various industrial solutions, and increase the numbers of speakers in the desired area.

- Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

This will help increase IEEE membership through linkage with professionals in industry. This will also help in creating venues at multiple locations in Karachi, and various cities of Sindh and Baluchistan.

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
 - i) Karachi Section invites the Chair of Lahore and Islamabad Sections in all major event. The cost of stay, and the air travel is borne by Karachi Section.
 - ii) Karachi Section shares speakers residing in areas of Karachi Section to other Sections. This has been an active source due to online Conferences.
- Joint activities with any other Section

There are three IEEE Sections in Pakistan. These are Karachi Section, Lahore Section, and Islamabad Section. The following three technical activities are rotated among the three sections,

- i) INMIC (International Multi-Topic Conference)
- ii) POCO (Panel of Conference Organizers)
- iii) Student Congress

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organizing technical, educational and professional activities

Quetta Subsection was inaugurated during 2020. Karachi Section guided the office bearers of Quetta Subsection for holding AGM, ExCom meetings, etc. Several technical seminars were jointly conducted by Karachi Section and Quetta Subsection during the last year.
- Joint activities for membership development

Quetta Subsection has nominated one person for membership development (MD). The Chair, MD at Quetta subsection is a member of the MD team of Karachi Section.
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

Quetta Subsection was inaugurated in 2020. It is hoped that the membership would be increased to 100+ members during the next 3 years. This will help them to be eligible for full Section.

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

The Sections comprises of highly dedicated, sincere, and efficient volunteers. This has resulted in holding consistent progress in term of technical activities, financially strong situation. R10 has acknowledged these achievements through various awards.

C.6 Problems anticipated and suggestions for solutions, if any

The following issues are anticipated with possible solutions,

- i) The Pandemic Covid-19 continue during substantial time of the year. This may result in Universities going for online teaching. This will also result in reduced number of technical / administrative meetings. This may also hinder the holding technical Conferences.
Solution: Focus of online activities.
- ii) Difficulty in sustaining IEEE members and may result in reduced membership.
Solution: Keep more active communication through email, webinars, virtual meetings.

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

A grant of USD 500/- was received in 2020. This will be utilized for developing water treatment plant at the remote locations of Sindh.

D.2 Goals and Future Plans

Following are the future plans,

- i) A formal agreement with SMEDA (Small and Medium Enterprise Development Authority).
- ii) Establish Robotic and Automation Chapter in Karachi Section.
- iii) Establish Student Branches at Mohammad Ali Jinnah University, Karachi, and Newport Institute of Communication and Economics (NICE), Karachi, ILMA University, Karachi, Indus University, and Sindh Institute of Management Technology (SIMT).
- iv) Computer Science Department of Karachi University has a plan of holding a Conference on March 4, 2021 at Karachi University.

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

Following are the plans for the year 2021

- i) Build a learning system where presentations of seminars, webinars, etc. are stored. These will be available for all members of IEEE Karachi Section.
- ii) Prepare a list of speakers in IEEE Karachi Section. The topics shall include technical, as well as non-technical areas like stress handling, time management, personality grooming, leadership quality development, etc.
- iii) Our section contributed towards Project **REACHING LOCALS** which aimed to encourage and support IEEE OU's in Region 10 to reach out to the community using local languages, with activities on subjects related to IEEE's Field of Interest. We recorded several video lectures in local languages (Urdu and Sindhi). IEEE region10 appreciated our efforts and the recognition of our contribution. They also provided the reward funding of USD 300/-.

D.4 Business Plan for Sustainable Growth and Financial Stability.

Due to Covid-19, very little physical activities were organized at the universities in 2020. As a result, a large number of student member did not renew their membership. It is planned that students will be apprised with the benefits of IEEE membership and encourage them to renew their memberships.

Glossary:

HIET:	Hamdard Institute of Engineering & Technology
IoBM:	Institute of Business Management
KIET:	Karachi Institute of Economics & Technology
NUCES:	National University of Computer & Emerging Sciences
UET:	University of Engineering & Technology