A brief report about   
IEEE IES Student & Young Professionals Activity Committee   
in 2018

# Social Media overview

The Youtube, Facebook, LinkedIn and Collabratec are all up to date.

here are the links:

<https://www.youtube.com/channel/UCKg8GNii0Q-ieXE56AXosGg>

<https://www.facebook.com/pg/IndustrialElectronicsSociety/events/>

<https://ieee-collabratec.ieee.org/app/community/129/Industrial-Electronics-Students-and-Young-Professionals/activities>

<https://www.linkedin.com/groups/3124640/>

Facebook:

it gave me only 2-year statistics.

1372 follower on 5-Jul-2017.

1788 followers on 2-Jul-2017

12 events created since the last 365 days and 2.5K people reached those events on the Facebook page.

LinkedIn:

could not find statistics there but we have now 5686 members and I see membership request every day.

Youtube:

555 subscribers since we started in 2016.

43.4K views since we started in 2016.

59.3K minute of watching since we started in 2016.

note that the youtube subscribers are growing yearly but we should wait till the end of 2019 to see that it is also growing in the current year.

# How many volunteers are active in the group?

8

# How many events did the group organize in 2018?

12

# Did you demonstrate Society value through additional activity - publications, conference sessions, etc.?

Yes – this is the spirit of our activity. This is the main idea (in our understanding). We are supporting Young Professionals & Students - YPS to attend our top-level conferences. IES gives them possibility to present their project additionally during the conference under the 3 Minutes Speeches Sessions. YPS presentations in the 3-minute speech - 3Ms (like 3-minutes talk or 3-minutes pitch talk but about their technical projects) form with 3 minutes video in background instead of Power Point presentation. The Jury under the IES – Student & Young Professionals Travel Paper Assistance – IES-SYPA, carefully evaluates all the presented videos. IEEE IES publish these videos at Youtube Channel. We are preparing them for publication in IEEE IES Transactions and Magazine (process is almost finished but most agreements has been done in 2018…). Most YPS are glad that they have done for the first time short, attractive and dynamic professional presentation of their scientific projects. Hope that fruits from our YPS activity will grow even faster. IES has 200 new members annually however after the meeting in Atlanta (this year) with other YP leaders I feel that together we would make a significant change in the following years – we can offer even more additional values, which IEEE would provide to YPS. THERE IS ALSO SOCIAL ASPECT of our support for YPS: some time ago I’ve met a IES couple (excellent young just graduated researchers) – She worked at different continent and He at another – they met during IEEE IES-SYPA 3Ms session at our top level conference only thanks to our monetary support for travel – good to have such kind of feedback! We are really connecting peoples and synergy is evident.

IES is organizing YPS Forum where best presentations are selected and awarded – 1500 $ for recognitions and diplomas.

We are organizing YPS Tutorial & Industry Links to give YPS opportunity to have a keynote at the international conferences and to interact with Mentors (well recognized speaker form academia and Industry).

We are organizing YPS Party – nice social free-style evening event where all YPS from the conference and local IEEE would meet IES Officers, Fellows, more experiences Volunteers and have a fun with snack and soft drinks.

# Iteration and description of the events organized by the group in 2018

# The following information are provided:

event title,

event type,

detailed description,

total number of attendees,

event date.

Note due to the limit the most important events are listed. For more, see reference 1 at the end:

**11.**

Annual Conference of the IEEE Industrial Electronics Society-IECON;

Young Professionals & Student Activity (Tutorial & Industry Link, YPS 3 minute speeches) at the IES Conference + YPS PARTY – **IES-YPS-A;**

IES-YPS-A is a place for excellence grow. Invited speakers gave very interesting talks, such as “Galvanically Isolated Impedance-Source DC-DC Converters Versatile Solution for Residential DC Microgrids,” given by YP. Another engaging talks were “The Stages in Creating a Successful Product with Innovation at Each Stage,” and “Building and Evolving a Company for 25 Years in the Ever-Changing Tech Ind.,” given by Mentors form industry.

“Designing Industrial Electronics Systems a Key … for Success,” by Mentor from Academia.

The SYP party at restaurant was free to attend, and more 150 people (YPS mostly) enjoyed the US food. The

IES-SYPA Diploma Ceremony was during the Gala Dinner. The IES president, distributed the diplomas to YPS - 15 IES-SYPA has been given (30k$ for YPS publication support);

1000;

21.10.18;

[1],[2],[3],[11]

**1**

First International Conference on Industrial Electronics for Sustainable Energy Systems-IESES;

IES-YPS-A;

IES-YPS-A “Leading the Way from Good Research to Successful Commercialization,” “Building a Career Based on Mastery of the Fundamentals” and excellent IES-SYPA 3Ms;

115;

31.01.18;

[4],[5];

**2.**

International Conference on Industrial Technology-ICIT;

IES-YPS-A;

We received 17 app. for the IES-SPTA awards (10 YPS supported by 2k$ each);

331;

20.02.18;

[4],[5],[6];

**3.**

International Conference on Compatibility, Power Electronics and Power Engineering-CPEPOWERENG;

IES-YPS-A;

It was an excellent place for YPS to present their projects and meet with colleagues and mentors;

c. 114;

10.04.18;

[5],[6],[7]

**5.**

International Symposium on Industrial Electronics-ISIE;

IES-YPS-A;

11 of 17 YPS applications submitted were selected for IES-SYPA;

237;

13.06.18;

[3],[5],[8],[9];

**12.**

**NTech Workshop YP - Industry 4.0 Tour;**

Workshop - strong industry relation, learning by integration;

NTech focus – electronics, application in five areas: *modern transport., manufacturing, space, energy, industrial automation*.The synergy effect!

c. 37;

30.11.18;

[10];

# References 1:

**[1]** [**https://ieeexplore.ieee.org/document/8673825**](https://ieeexplore.ieee.org/document/8673825)

**[2]** [**http://www.iecon2018.org/studentsAndYoungProfessionals.html**](http://www.iecon2018.org/studentsAndYoungProfessionals.html)

**[3] https://www.youtube.com/channel/UCKg8GNii0Q-ieXE56AXosGg/playlists**

**[4]** [**https://ieeexplore.ieee.org/abstract/document/8395334**](https://ieeexplore.ieee.org/abstract/document/8395334)

**[5] https://ieee-collabratec.ieee.org/app/community/129/Industrial-Electronics-Students-and-Young-Professionals/activities**

**[6]** [**https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8474457**](https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8474457)

**[7]** [**http://www.cpe-powereng2018.org/for-authors/student-yp-activity/**](http://www.cpe-powereng2018.org/for-authors/student-yp-activity/)

**[8]** [**https://www.ieee-isie2018.org/student.php**](https://www.ieee-isie2018.org/student.php)

**[9]** [**https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8581617**](https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8581617)

**[10]** [**http://www.ieee.pl/?q=node/147**](http://www.ieee.pl/?q=node/147)

**[11]** [**http://www.ieee-ies.org/syp**](http://www.ieee-ies.org/syp)

# In addition, very successful events:

**4.**

**180504 YEF-ECE 2018**

event title,

YEF-ECE 2018 - 2nd International Young Engineers Forum on Electrical and Computer Engineering

event type,

Forum

detailed description,

The International Young Engineers Forum looks for the latest developments and innovative applications in electrical and computer engineering, dealing with systems’ design and utilization, looking forward to efficient devices and systems with appropriate control algorithms to meet the needs of business and industry in a global economy. This event was a unique opportunity for young engineers to connect with each other enabling experience’s sharing and to become internationally active.

total number of attendees,

c. 20

event date.

2018.05.04

<http://www.uninova.pt/yef-ece/yef-ece18/>

**6.**

**180704-07\_IEEE\_HSI18\_Gdansk**

event title,

the IEEE Industrial Electronics Society (IES) supported best-paper awards at the International Conference on Human–System Interaction (HSI) and the International Summer School on Deep Learning (ISSonDL)

event type,

Conference and Summer School – Recognitions (Diploma+ monetary gratifications) for the best presentations by YP and Students.

detailed description,

Every year, HSI has presented best paper awards. This is the first time, however, that the competition among S&YPs was supported by IEEE IES. Three reviewers evaluated each paper. The four winning papers each received scores of over eight out of a possible ten. Excellent place to gain cooperation between IEEE IES, IEEE PS, Gdansk University and Industry like Intel and Nvidia !

total number of attendees,

c. 200

event date.

2019.07.04-06

<https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8581617>

<http://hsi2018.welcometohsi.org/>

**7.**

**180717-21\_YPinSPACE\_Tushar**

event title,

YOUNG PROFESSIONALS IN SPACE 2018

event type,

Workshop

detailed description,

IEEE IES Backs YPs in Space Thanks in large part to Tushar Sharma, an IEEE Young Professional, IEEE IES supported YPs in Space 2018, which took place in Barcelona, 17– 21 July (Figure 3). Other supporters included the IEEE Spain Section Joint Chapter, which is chaired by Enrique Romero-Cadaval. Partnering in the event were the IEEE Geoscience and Remote Sensing Society; IEEE Systems,

Man, and Cybernetics Society; IEEE Microwave Theory and Techniques Society; IEEE Antennas & Propagation Society; IEEE Industrial Electronics Society; IEEE Aerospace and Electronic Systems Society; Region 8 YPs; and IEEE YPs. Excellent example of interdisciplinary co-operation.

Now we continue this activity Poland and Spain IEEE Chapters and we would like to support YPinSpace 2019!.

total number of attendees,

c.100

event date.

2018.07. 17-21

<https://entrepreneurship.ieee.org/2018_09_05_young-professionals-in-space/>

<https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8581617>

**8.**

**180718-20\_INDIN18\_Paulo Leitao**

event title,

IEEE 16TH INTERNATIONAL CONFERENCE OF INDUSTRIAL INFORMATICS INDIN2018

event type,

Young Professionals & Student Activity (YPS 3 minute speeches of IES-SYPA competition awardees) at the IES Conference

detailed description,

Porto, Portugal. The conference chairs were Mario de Sousa and Paulo Leitao The award winners were as follows:

1) “A Cloud-Based Training and Evaluation System for Facial Paralysis Rehabilitation,” by Zeqing Jiang, Wenbin Dai, Wenjin Wang, and Wei Wang; Shanghai Jiao Tong University, China

2) “MeDI: Measurement-Based Device Identification Framework for Internet of Things,” by Narges Yousefnezhad, Manik Madhikermi, and Kary Framling; Aalto University, Finland.

total number of attendees,

c. 160

event date.

2018.06.18-20

<https://web.fe.up.pt/~indin2018/>

<https://www.youtube.com/watch?v=B8udYHYRPFs&list=PLO5umi31c_80LEdtWCEZXWjAqiOmRniZV>

**9.**

**180826-30\_PEMC18\_Peter\_Korondi**

event title,

the 18th IEEE International Power Electronics and Motion Control Conference 2018

event type,

Young Professionals & Student Activity (YPS 3 minute speeches of IES-SYPA competition awardees) at the IES Conference

detailed description,

Winners from Australia and Algeria in Budapest Teams from the University of New South Wales, Australia, and the University of Sciences and Technology of Oran, Algeria, each won IES-SYPA awards

The winners were as follows: 1) “Output Power Regulation of a Virtual Oscillator Controlled Inverter,” by Muhammad Ali, Hendra I. Nurdin, and John E. Fletcher; University of New South Wales, Australia 2) “Outer Race Fault Diagnosis by Comparison between the Power Spectral Density and the Kurtogram,” by Mohammed-El-Amine Khodja, AmeurFethi Aimer, Ahmed-Hamida Boudinar, and Azeddine Bendiabdellah; University of Sciences and Technology of Oran, Algeria.

total number of attendees,

c. 171

event date.

2018.08.26-30

Whenever possible, please include links to online photo albums and post-event material.

https://www.youtube.com/watch?v=rJFTeQea140&list=PLO5umi31c\_816yB6PoLa8h1mNJiLgVhTH

<http://www.ieee-pemc2018.org/registration-form/ies-students-grants>

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8581617

**10.**

**180904-07\_ETFA18\_RobertoOboe**

event title,

the IEEE 23rd International Conference on Emerging Technologies and Factory Automation in Torino

event type,

Young Professionals & Student Activity (YPS 3 minute speeches of IES-SYPA competition awardees) at the IES Conference

detailed description,

YPS teams from South Korea, Brazil, and Spain were each awarded US$6,000 for papers they submitted. The conference chairs were Luca Durante, Lucia Lo Bello, and Roberto Oboe. The winners were as follows: 1) “An AutomationML/OPC UA-based

Industry 4.0 Solution for a Manufacturing System,” by Xun Ye and Seung Ho Hong; Hanyang University, South Korea 2) “An Empirical Study on the Adequacy of MBPTA for Tasks Executed on a Complex Computer Architecture with Linux,” by Karila Palma Silva, Luis Fernando Arcaro, Daniel Bristot de Oliveira, and Romulo Silva de Oliveira; Federal University of Santa Catarina, Brazil 3) “Synthesis of Controllers from Finite State Stack Machine Diagrams,” by Daniel Rivas, Pragna Das, Joaquin

Saiz-Alcaine, and Lluis Ribas-Xirgo; Universitat Autonoma de Barcelona, Spain.

total number of attendees,

c.100

event date.

2018.09.04-07

<http://ieee-etfa2018.com/student.php>

<https://www.youtube.com/watch?v=6QhDUOS5cnY&list=PLO5umi31c_82AC9XgEvIuj4c_YOKigqVp>

<https://ieee-collabratec.ieee.org/app/community/129/Industrial-Electronics-Students-and-Young-Professionals/activities>

# The Icing on the Cake

# What sets your group apart from others?

# Details about the group that are relevant and have not been mentioned previously.

Take a look on IES YPS part of this membership support. The GCP was prepared in 05.2018, and it was accepted in 06.2018 by the IES AdCom and in 11.2018 by the TAB.

For 19 y., the Student & Young Professionals Activity Committee-SYP-AC has supported young, talented, and hardworking people; projects through several activities mainly IES conferences [1]. The IES increases its investment in growth in quality and excellence in professional and technical skills. The TAB’s Society Review Committee-SCRC has recognized the YPS-AC’s actions as a best practice:

The IES makes a substantial investment in scholarships, investing approximately US$100k/y;

The IES budget history for young-researcher support is shown in [2]. IES would like to close cooperate with all IEEE bodies. The general idea is presented in [2], where YPS cooperation inside and outside of the Society is presented. YPS-AC works on our current activities and introduce new, which elevate our excellence. The IES would like to provide the best conditions for members and increase its membership:

■ IES is like all human societies; that is, it draws its energy from the youngest. This is nature!

■ Working with young gives our Fellows opportunities to be mentors.

■ Thanks to Mentors, IES mentees become the best professionals ever.

How we would like to reach our goals? We have found the answer! Some ideas are presented in the article [2], you can find seven goals and outcomes of the YPS (Table 1,2) [2]. The purpose of the YPS-AC and its projects in the broader world context could be simply defined: Today, Gaia, the mother Earth, becomes like our family home. Our house is well connected by:

■ information flow—the Internet of Everything

■ energy flow—smart grids

■ technology flow—Industry 4.0

■ automation and robotics, not only in industry but also, in health care, rehabilitation, and so forth. We know that there is a potential to activate the scientific community in the world.

The IES SYP-AC proposes a solution for how to attract new YPS members (and their mentors). Please note what is missing from the aforementioned list. After a while, you realize what it is—personal contact.

Bringing people together is part of the our mission, and it is possible thanks to direct interaction with professionals who can help us attract the most active young professionals especially from fast-growing countries (linking them with people in highly developed ones). Therefore:

"In you there is hope, for you belong to the future, just as the future belongs to you. For hope is always linked to the future; it is the expectation of ‘future good things’"[3]

# References 2:

[1] IEEE Industrial Electronics Society, “Introduction to the IEEE IES Students and Young Professionals Activity Committee (SYP-AC),” [Online]. Available: http://www.ieee-ies.org/syp

[2] <https://ieeexplore.ieee.org/document/8744345>

[3] Karol Wojtyla

# Publications in IEEE Industrial Electronic Magazine

Students and Young Professionals News

<https://ieeexplore.ieee.org/document/8322336>

Student Paper Travel Assistance Awards at Two Conferences <https://ieeexplore.ieee.org/abstract/document/8395334>

Taking the Stage at CPE-POWERENG 2018

<https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8474457>

Projects and Papers Internationally Honored

<https://ieeexplore.ieee.org/document/8581617>

Students and Young Professionals Activities at the 44th Annual Conference of the IEEE Industrial Electronics Society

<https://ieeexplore.ieee.org/document/8673825>

A New Growth Center Project Focuses on Young Researchers

<https://ieeexplore.ieee.org/document/8744345>