History of PEMC
(1970 – 2020)

Marian P. Kazmierkowski
Warsaw University of Technology, Poland

Viliam Fedák
Technical University Kosice, Slovakia
History of PEMC

Outline

- Conferences before founding the PEMC Council 1970 – 1996
- Founding of the PEMC Council 2 Sept. 1996
- Agreement with EPE Association 1998
  - Conferences EPE-PEMC 2000 – 2012
- Agreement with IEEE 2016
  - Conferences IEEE-PEMC since 2016
- PEMC Awards 1996 – 2021
- PEMC Chairmen 1970 – 2021
- Posters from PEMC Conferences
History of PEMC

Time before founding the PEMC Council

- **PEMC’70** – Budapest, Hungary  
  Chair: Prof. Istvan Rácz

- **1st PEMC’73** – Budapest, Hungary  
  Chair: Prof. Istvan Rácz

- **2nd PEMC’77** – Budapest, Hungary  
  Chair: Prof. Istvan Rácz

- **3rd PEMC’81** – Budapest, Hungary  
  Chair: Prof. Istvan Nagy

- **4th PEMC’85** – Budapest, Hungary  
  Chair: Prof. Istvan Nagy

- **5th PEMC’90** – Budapest, Hungary  
  Chair: Prof. Istvan Nagy

- **6th PEMC’94** – Warsaw, Poland  
  Chair: Prof. Włodzimierz Koczara

- **7th PEMC’96** – Budapest, Hungary  
  Chair: Prof. Istvan Nagy
Prof. Istvan Nagy:

- invited representatives from small and middle sized countries
- In order to form a group under the banner of PEMC for promoting interest of the PEMC countries in the international arena
- One of the main objectives – the integration of the regions into Europe and world community.

Originally proposed field of cooperation:

- Organisation of PEMC Conferences, Symposia, Workshops, Tutorials, Exhibitions
- Supporting these events by joint applications for funding
- Promoting positions of the members in International Technical Organisations (EPE, IEEE)
- Joint research projects and applications for funding and joint venture in education, etc.
History of PEMC
The PEMC Council Foundation Members

2 September 1996

Prof. Istvan Nagy (chair) and the following Founding Members:

Austria: H. Kleinrath, invited also: J.W. Kolar, F.C. Zach

Czech Republic: Z. Čeřovský, J. Pavelka

Hungary: S. Halász, P. Korondi, K. Veszprémi

Italy: S. Bolognani, G. Buja

Poland: M. P. Kazmierkowski, W. Koczara, M. Tondos

Slovakia: V. Fedák, invited also: J. Timko

Slovenia: K. Jezernik

Conference chairs:

EPE-PEMC‘98
PEMC’18
PEMC‘94
EPE-PEMC‘00
EPE-PEMC‘04
The main goal of the PEMC-Council is to keep organizing International Conferences in the field of Power Electronics and Motion Control circulating in Europe as a direct continuation of a conference series in the field starting in Budapest in 1970.
History of PEMC

PEMC conference topics

- Power Electronic Converter Topologies, Design and Control
- Power Electronics in Transportation
- Power Electronics in Smart Grid Technologies, Applications and Policies
- Power Electronics in Energy Generation, Transmission and Distribution
- Power Electronics in Renewable Energy Systems, Power Supplies
- Electrical Machines and Actuators
- Motion Control, Adjustable Speed Drives
- Robotics, Mechatronics
- Sensors, Measurement and Observation Techniques
- Active Filtering and Unity Power Factor Correction
- Semiconductor Devices Modeling, Packaging and Integration
- Education
- Other Related Topics

19th International Conference IEEE-PEMC, Gliwice, Poland 25 – 29 April 2021
8th PEMC’98 – Prague, Czech Republic Chair: Prof. Zdeněk Čeřovský

In Prague the Agreement about Co-operation between the Executive Council of the EPE Association (European Power Electronics) with the headquarters in Brussels and PEMC Council in Budapest was signed. This was the start of the EPE-PEMC conference series.
History of PEMC
the EPE-PEMC Conferences

- 9th EPE-PEMC’00 – Kosice, Slovakia, Chair: Prof. Viliam Fedák
- 10th EPE-PEMC’02 – Dubrovnik, Croatia, Chair: Prof. Drago Ban
- 11th EPE-PEMC’04 – Riga, Latvia, Chair: Prof. Leonids Ribickis
- 12th EPE-PEMC’06 – Portoroz, Slovenia, Chair: Prof. Karel Jezernik
- 13th EPE-PEMC’08 – Poznan, Poland, Chair: Prof. Krzysztof Zawirski
- 14th EPE-PEMC’10 – Ohrid, Macedonia, Chair: Prof. Slobodan Mircevski
- 15th EPE-PEMC’12–ECCE Europe Novi Sad, Serbia, Chair: Prof. Vladimir Katic
In 2013, the EPE signs an agreement with IEEE PELS for organization of joint conferences in Europe. After much discussion, the PEMC Council decides not to sign this tripartite agreement. In this way, the EPE logo disappears from the PEMC conference.

16th PEMC’14 – Antalya, Turkey  
Chair: Prof. Ilhami Colak
History of PEMC

Agreement with IEEE – IEEE-PEMC series

IEEE technical societies co-sponsored PEMC conferences:


- 17th IEEE-PEMC’16 – Varna, Bulgaria, Co-Chairs: Prof. I. Yatchev and Prof. Stanimir Valtchev
- 18th IEEE-PEMC’18 – Budapest, Hungary, Chair: Prof. Péter Korondi
- 19th IEEE-PEMC’20 – Gliwice, Poland, Chair: Prof. Mariusz Stepień

19th International Conference IEEE-PEMC, Gliwice, Poland 25 – 29 April 2021
# History of PEMC

## EPE-PEMC Awards Committee

**EPE-PEMC Awards Committee (2000–16)**

- **Prof. Marian P. Kazmierkowski**, Poland
  - Chair
- **Prof. Zdeněk Čeřovský**, Czech Republic
  - Member
- **Prof. Sandor Halász**, Hungary
  - Member
- **Prof. Viliam Fedák**, Slovakia
  - Member

**IEEE-PEMC Awards Committee (since 2016)**

- **Prof. Lech Grzesiak**, Poland
  - Chair
- **Prof. Viliam Fedák**, Slovakia
  - Vice-chair
- **Prof. Ilhami Colak**, Turkey
  - Member
- **Prof. B. Nahid-Mobarakeh**, France
  - Member
- **Prof. Stanimir Valtchev**, Bulgaria
  - Member
Prof. Frede Blaabjerg (right), 2010 laureate of the “EPE-PEMC Achievements Award”

From left:
Prof. G. Arsov, EPE-PEMC 2010 Tech. Program Chair;
Prof. M. Jufer, Past President of the EPE Association;
Prof. I. Nagy, Chairman of the EPE-PEMC Council
Prof. M. P. Kazmierkowski, Chair of the EPE-PEMC Award Committee

14th EPE-PEMC’10, Ohrid, Macedonia
History of PEMC

Prof. Istvan Nagy Award

This is the highest PEMC award proposed bi-annually for the lifetime achievements and contributions.

Prof. Istvan Nagy, the research professor at the Budapest University of Technology, Hungary, was one of the key founders of PEMC and driving force behind the PEMC conference series.
History of PEMC

PEMC Council Awards

Prof. Werner Leohard, Germany
Prof. Sakae Yamamura, Japan
Prof. Paolo Ferraris, Italy
Prof. Eisuke Masada, Japan
Prof. John Kassakian, USA
Prof. Ion Boldea, Romania
Prof. Dushan Boroyevich, USA
Prof. Kouhei Ohnishi, Japan
Prof. Robert D. Lorenz, USA
Prof. Rik De Doncker, Germany
History of PEMC

PEMC Council Awards

Prof. Thomas A. Lipo, USA
Prof. Atsuo Kawamura, Japan
Prof. Thomas A. Lipo, USA
Prof. Frede Blaabjerg, Denmark
Prof. Grahame D. Holmes, Australia
Prof. Fred Lee, USA
Prof. Eric Monmasson, France
Prof. Johann Kolar, Switzerland
Prof. Bogdan M. Wilamowski, USA
History of PEMC

Istvan Nagy Awards (since 2018)

IEEE-PEMC’18 Budapest
Prof. Jaeho Choi, South Korea

IEEE-PEMC’18 Budapest
Prof. Emil Levi, United Kingdom

IEEE-PEMC’20 Gliwice

IEEE-PEMC’20 Gliwice
History of PEMC

Chairmen of PEMC Conferences

PEMC’70, 73, 77 Budapest
Prof. Istvan Rácz, Hungary

PEMC’81, 85, 90, 96 Budapest
Prof. Istvan Nagy, Hungary

PEMC’94 Warszaw
Prof. Wlodzimierz Koczara, Poland

PEMC’98 Prague
Prof. Zdeněk Čeřovský, Czech Republic

EPE-PEMC’00 Košice
Prof. Viliam Fedák, Slovakia

EPE-PEMC’02 Dubrovnik
Prof. Drago Ban, Croatia

EPE-PEMC’04 Riga
Prof. Leonids Ribickis, Latvia

EPE-PEMC’06 Portorož
Prof. Karel Jezernik, Slovenia
History of PEMC

Chairmen of PEMC Conferences

- **IEEE-PEMC'08 Poznan**
  - Prof. Krzysztof Zawirski, Poland

- **IEEE-PEMC'12 Novi Sad**
  - Prof. Vladimir Katić, Serbia

- **IEEE-PEMC'10 Ohrid**
  - Prof. Slobodan Mircevski, Macedonia

- **IEEE-PEMC'14 Antalya**
  - Prof. Ilhami Colak, Turkey

- **IEEE-PEMC'16 Varna**
  - Prof. Stanimir Valtchev, Bulgaria

- **IEEE-PEMC'18 Budapest**
  - Prof. Péter Korondi, Hungary

- **IEEE-PEMC'20 Gliwice**
  - Prof. Mariusz Stepień, Poland
1st – 5th PEMC Conferences, Budapest, Hungary

PEMC’70, 73, 77
**Prof. Istvan Rácz**
BMGE Budapest

PEMC’81, 85, 90
**Prof. Istvan Nagy**
BMGE Budapest

Hungary, Budapest where the PEMC Conference series started in 1970. Initiated, chaired by Prof. Dr. I. Rácz, organised by the Hungarian Electrotechnical Association.

Conference sites:
1st, 2nd, 3rd, 4th, 5th Conference
7th Conference
6th Conference

Budapest today
Parliament
Buda Castle
Chain Bridge

EPE - PEMC UNIVERSITY OF TECHNOLOGY
1st – 5th PEMC Conferences, Budapest, Hungary

PEMC’70, 73, 77
Prof. Istvan Rácz
BMGE Budapest

PEMC’81, 85, 90
Prof. Istvan Nagy
BMGE Budapest

EPE - PEMC CONFERENCES SERIES
Hungary, Budapest
where the PEMC Conference series started in 1970.
Initiated, chaired by Prof. Dr. I. Rácz, organised by the Hungarian Electrotechnical Association

Conference sites

PEMC’70
PEMC’73
PEMC’73
PEMC’90
Chairman

Prof. Wlodzimierz Koczara
Warszaw WUT

252 papers
403 participants
40 countries

Conference venue

Old town in Warszaw

Palace of Culture and Science
7\textsuperscript{th} PEMC, Budapest, Hungary
2–4 September 1996

Chairman
Prof. Istvan Nagy
BMGE Budapest

Foundation of the PEMC Council
Mon, 2 Sept. 1996, 12:30-15:00
Chairman
Prof. Zdeněk Čeřovský, CTU Prague

311 papers
407 participants
9th EPE-PEMC’00, Košice, Slovakia
5–7 September 2000

Chairman
Prof. Viliam Fedák,
TU Košice

285 papers
370 participants
55 countries
Conference preparation:

- On site visit
- Inspection by: PEMC council and EPE Association representatives
- Reviewing of papers
10th EPE-PEMC’02, Dubrovnik, Croatia
9–11 September 2002

Chairman
Prof. Drago Ban,
Uni Zagreb

389 papers
580 participants
54 countries
Chairman
Prof. Leonids Ribickis,
Riga TU

486 papers
515 participants
47 countries
Chairman

Prof. Karel Jezernik,
UNI Maribor

368 papers
504 participants
57 countries
12th EPE-PEMC’06, Portoroz, Slovenia

Extended PEMC Council meeting during the conference.
Invited also:
- EPE Association representatives
- keynote speakers
13th EPE-PEMC’08, Poznan, Poland
1–3 September 2008

Chairman

Prof. Krzysztof Zawirski,
Poznan PUT

417 papers
500 participants
53 countries
13th EPE-PEMC’08, Poznan, Poland

PEMC Conference chairs:

from the left:

Prof. W. Koczara (1994)
Prof. K. Zawirski (2008)
Prof. K. Jezernik (2004)
Prof. V. Fedak (2000)
Prof. I. Nagy, PEMC-C chair
Prof. S. Mircevski (2010)
Prof. M. Kazmierkowski (Award Com.)
Prof. D. Ban (2002)
14th EPE-PEMC’10, Ohrid, Macedonia
6–8 September 2010

Chairman
Prof. Slobodan Mircevski,
Macedonia

346 papers
451 participants
50 countries

Opening Conference
14th EPE-PEMC’10, Ohrid, Macedonia

Opening the conference

Closing Session
from the left:
Prof. I. Nagy (PEMC-C Chair)
Prof. S. Mircevski (General Chair)
Prof. T. Undeland (EPE Association)
Prof. Vladimir Katić invites participants for the next EPE-PEMC Conference in Novi Sad, Serbia (during the closing session of EPE-PEMC’10).
Prof. V. Katic (PEMC'12) is giving to Prof. I. Colak (PEMC'14) two PEMC symbols:

- a stick (to touch and hunt the participants) and
- an empty bag (to collect money to run the conference)...

😊 😊 😊
16th PEMC’14, Antalya, Turkey
21–24 September 2014

Chairman
Prof. Ilhami Colak,
Gazi University

257 papers
Chairman

Prof. Stanimir Valchev,
Universidade NOVA de Lisboa

Keynote lecture by Prof. Pavol Bauer
Society loses a Beloved Member

Istvan "Steve" Nagy, passed away on July 6, 2015 in Budapest at the age of 84.

The Society and the world will remember "Steve" as a wise man and a true gentleman.

What we have done for ourselves alone dies with us; what we have done for others and the world remains and is immortal. (Albert Pike)

Our duty and privilege to keep PEMC Council and PEMC conference series moving forward
18th IEEE-PEMC’18, Budapest, Hungary
26–30 August 2016

Chairman

Prof. Péter Korondi,
BMGE Budapest
PEMC Council is voting and approving the next conference venue:

IEEE-PEMC'20 Gliwice
19th IEEE-PEMC’20, Gliwice, Poland
25–29 April 2021
(the online conference)

Chairman
Prof. Mariusz Stepień,
SUT Gliwice

132 papers
164 participants
31 countries

History of PEMC
Remembering Ceased Members and Supporters

Prof. Jiří Pavelka, CTU Prague Czech Republic

Prof. István Nagy, BMGE Budapest Hungary

Prof. Fethah Kolonić, Uni Zagreb Croatia

Prof. Ján Fetyko, TU Kosice Slovakia

Prof. Mike Case, Uni of Johannesburg South Africa

Prof. Sergey Ryvkin, Moscow Russia

Prof. László Szentirmai, Uni Miskolc Hungary
History of PEMC

PEMC Council Organization

(EPE)-PEMC Chair (1996 – 2016)
- Prof. Istvan Nagy, Hungary Chair

IEEE-PEMC Chairs (since 2016)
- Prof. Pavol Bauer, The Netherlands Chair
- Prof. Peter Korondi, Hungary Vice-chair
- Prof. Viliam Fedák, Slovakia Vice-chair
- Prof. Krzystof Zawirski, Poland Vice-chair

PEMC Council
Executive Committee
Life members
The 50th anniversary allowed us to see how the PEMC developed from a series of national Hungarian conferences, through European to world conferences.

Through a series of conferences, the PEMC Council made it possible to meet and exchange ideas and present the achievements of a whole generation of scientists from Central and Eastern Europe, offering much cheaper (50% of what the EPE in Western Europe) conferences!

As a representative of the departing generation that led to the successes of the PEMC in the past, on the occasion of the 50th Jubilee

I would like to wish you a new generation of activists and volunteers of harmonious cooperation with the further development and continuation of the successes of the PEMC "under young leadership"!