Monday, 2nd December		
8:30-19:00	PowerMEMS School	
Tuesday, 3rd December		
8:00-15:00	Visiting of Memorial and Museum Auchswitz-Birkenau Former German Nazi Concentration and Extermination Camp	
15:00-18:00	Registration	
18:00-21:00	Informal Cocktail Get-Together	
Wednesday, 4th December		
9:00-10:40	Opening session	
10:40-11:20	Refreshment and coffee break	
11:20-13:00	Thematic session T1-A	Thematic session T1-B
13:00-14:20	Lunch break	
14:20-16:00	Focused Session 1	
16:00 -18:30	Poster session (including coffee break)	
Thursday, 5th December		
8:30-9:10	Plenary session	
9:10-9:20	Technical break	
9:20-11:00	Thematic session T2-A	Focused session 2
11:00-11:30	Refreshment and coffee break	
11:30-13:10	Thematic session T3-A	Thematic session T3-B
13:10-14:20	Lunch break	
14:20-16:00	Thematic session T4-A	Thematic session T4-B
16:30 -19:00	Transfer to Wieliczka and Salt Mine sightseeing	
19:00-23:00	Conference Gala Dinner at Salt Mine „Wieliczka”	
Friday, 6th December		
8:30-9:10	Plenary session	
9:10-9:20	Technical break	
9:20-11:00	Thematic session T5-A	Focused Session 3
11:00-11:30	Refreshment and coffee break	
11:20-13:10	Thematic session T6-A	Thematic session T6-B
13:10-13:30	Closing Ceremony including Awards Ceremony	
13:30-15:00	Lunch	

Monday, 2nd December	
8:30-19:00	**PowerMEMS School** Location: AGH University of Science and Technology Faculty of Computer Science, Electronics and Telecommunications Building D-17, ul. Kawiory 21

Tuesday, 3rd December	
8:00-15:00	**Visit to the Memorial and Museum Auchswitz-Birkenau Former German Nazi Concentration and Extermination Camp** Buss transport from the Conference place (Holliday Inn Hotel): departure: 8:00, return: ~15:00
15:00-18:00	**Registration** **International Steering Committee meeting (16:00 – 18:00)** Location: Conference place: Holliday Inn Krakow City Centre ul. Wielopole 4
18:00-21:00	**Informal Cocktail Get-Together**

Wednesday, 4th December

Opening session (9:00-10:40)

9:00-9:20	Jan Dziuban, Rafał Walczak, *Welcome address*
9:20-10:00	Artur Chmielewski, *Invited talk 1*
10:00-10:40	Don Futaba, *Invited talk 2*

Refreshment and coffee break (10:40-11:20)

Thematic session T1 (11:20-13:00)

	T1-A Materials for energy conversion (Chair: David P. Arnold)	**T1-B Fluid, heat and mass transfer and chemical reactions in power/energy systems Fuel cells, reactors, and combustors Batteries, super-capacitors, and chemical energy storage** (Chair: Luis Fernando Velásquez-Garcia)
11:20-11:40	T1-A1 Jakyung Eun, Sanghee Lee, Sangmin Jeon, *Moisture-driven Power Generator Based on Laser Induced Graphitization with Gradual Defocusing Method*	T1-B1 Emmanuel Segura-Cardenas, Luis Fernando Velásquez-García, *Low-cost, Rugged Microfluidics via Silver Clay Extrusion*
11:40-12:00	T1-A2 Katarzyna Ewa Zakrzewska, Anna Kusior, Marta Radecka, *Light Harvesting and Charge Energy Transfer in Metal Oxide Nanomaterials for Hydrogen Energy Generation*	T1-B2 Junjie Peng, Minhyeok Lee, Yong Fan, Atsushi Yamamoto, Yuji Suzuki, *Convection-effect-enhanced Thin Metal Thermoelectric Module Directly-heated by Catalytic Combustion*
12:00-12:20	T1-A3 Marisa Falco, *Crosslinked Composite Polymer Electrolytes with Super Li Ion Conductive Ceramic Materials as Electrolytes for Lithium Batteries*	T1-B3 Alissa Johnson, Ryan Kohlmeyer, Mehmet Ates, Chadd Kiggins, Aaron Blake, Xiujun Yue, John Cook, James Pikul, *Performance Modeling and Design of High Energy Density Microbatteries*
12:20-12:40	T1-A4 Tai Nguyen, Noureddine Adjeroud, Sebastjan Glinsek, Jérôme Guillot, Jérôme Polesel Maris, *Low Temperature Growth of Piezoelectric Aln Films by Plasma Enhanced Atomic Layer Deposition and Magnetoelectric Coupling with Nickel for Energy Harvesting Applications*	T1-B4 Sheng Yong, Nicholas Hillier, Stephen Beeby, *Integrated flexible and rechargeable textile battery fabricated in a standard cotton fabric*
12:40-13:00	T1-A5 Kai Wang, Xuhan Dai, Guifu Ding, Xiaolin Zhao, Xiaojian Xiang, *A Combined Nonlinearity Mechanism for Significant Extension of the High Energy Orbit of MEMS-based Bi-stable Energy Harvester*	T1-B5 Francesca Coló, Marisa Falco, Giulia Piana, Federico Bella, Giuseppina Meligrana, Claudio Gerbaldi, *Development and characterization of polymer-based electrolytes and nanostructured electrodes for energy storage devices*

Lunch break (13:00-14:20)

Focused Session 1: Micro-devices for space applications (14:20-16:00), Chair: Artur Chmielewski

14:20-14:45	**F1-1** Stephen Eisele (Virgin Orbit)
14:45-15:10	**F1-2** Vlada Stamenkovic (Jet Propultion Systems, NASA)
15:10-15:35	**F1-3** Radosław Łapczyński (SatRevolution)
15:35-16:00	**F1-4** Christophe Gorecki (Femto-St)

Poster session / PowerMEMS in Action session (16:00 -18:30)

including coffee break

Thursday, 5th December

Plenary session (8:30-9:10), Chair: Steve Beeby

8:30-9:10	Alireza Nojeh, *Invited talk 3*

Technical break (9:10-9:20)

Thematic session T2 (9:20-11:00)

	T2-A Thermoelectric energy-harvesting (Chair: Luis Fonseca)	**Focused session 2: Energy harvesters for vehicle applications** (Chair: Paul Mitcheson)
9:20-9:40	T2-A1 Luis Fonseca, Marc Dolcet, Andrej Stranz, Marc Salleras, Jose Manuel Sojo, Merce Pacios, Alex Morata, Albert Tarancon, *Tightly Packed Design for an All-Silicon Planar Thermoelectric Microgenerator*	F2-1 Anjneya Verma, *KNN Devices*
9:40-10:00	T2-A2 Takao Mori, *Thermoelectric Energy Harvesting Materials and Applicative Issues for Powering IoT Sensors and Devices*	F2-2 Neetu Kumari, *Piezoelectric-pyroelectric Energy Transducer*
10:00-10:20	T2-A3 Shunsuke Yamada, Momoe Akuto, Hiroki Taniyama, Eiji Iwase, *A Hybrid Silicone Rubber Sheet Combined with High and Low Thermal Conductivities for Stretchable Thermoelectric Generator*	F2-3 Giulia Lombardi, Mickaël Lallart, Michail Kiziroglou, Eric M. Yeatman, *AC/DC Power Conversion Improvement of Rotational Electromagnetic Energy Harvesting Using Piezoelectric Elements for Active Rectification*
10:20-10:40	T2-A4 Momoe Akuto, Kana Fukuie, Eiji Iwase, *Origami Heat Radiation Fin for Stretchable Thermoelectric Generator*	F2-4 Giacomo Clementi, Giulia Lombardi, Samuel Margueron, Miguel Angel Suarez, Eric Lebrasseur, Sylvain Ballandras, Joel Imbaud, Frank Lardet-Vieudrin, Ludovic Gautier-Manuel, Bernard Dulmet, Paul Muralt, Mickael Lallart, Ausrine Bartasyte, *Characterization of Lead-free $LiNbO_3$ Energy Harvesters*
10:40-11:00	T2-A5 Eiko Bäumker, Pascal Beck, Peter Woias, *Thermal Energy Harvesting Through the Fur of Endothermic Animals*	F2-5 Anxin Luo, Yulong Zhang, Weihan Xu, Yan Lu, Fei Wang, *An Inertial Rotary Electrostatic Energy Harvester for Vibration at Ultra-Low Frequency* F2-6 Yulong Zhang, Anxin Luo, Xiangtian Dai, Yifan Wang, Fei Wang, *A Novel Mechanical Energy Conversion Structure for Rotational Electromagnetic Energy Harvester*

Refreshment and coffee break (11:00-11:30)

Thematic session T3 (11:30-13:10)

	T3-A RF, inductive and acoustic power transfer (Chair: Xiaohong 'Ellen' Wang	**T3-B Mechanical energy harvesting – Electromagnetic Mechanical energy harvesting – Piezoelectric Motors/generators, pumps and actuators** (Chair: Yuji Suzuki)
11:30-11:50	T3-A1 Olivier Freychet, Sébastien Boisseau, François Frassati, Vincent Josselin, Pierre Gasnier, Ghislain Despesse, *A Versatile Through-metal-wall Acoustic Power and Data Transfer Solution*	T3-B1 Dong Han, Makoto Kine, Tadahiko Shinshi, Shogo Kadota, *MEMS Energy Harvester Utilizing a Multi-pole Magnet and a High-aspect-ratio Array Coil for Low Frequency Vibrations*
11:50-12:10	T3-A2 Mahmoud Wagih, Alex S. Weddell, Steve Beeby, *Characterizing and Modelling Non-linear Rectifiers for RF Energy Harvesting*	T3-B2 Hailing Fu, Wenzhe Song, Yong Qin, Eric Yeatman, *Broadband Vibration Energy Harvesting from Underground Trains for Self-Powered Condition Monitoring*
12:10-12:30	T3-A3 Mahmoud Wagih, Abiodun O. Komolafe, Bahareh Zaghrai, *Position Independent Wearable 6.78 MHz Near-field Radiative Wireless Power Transfer using Electrically-small Embroidered Textile Coils*	T3-B3 Takashi Aiba, Shota Hirai, Kensuke Kanda, Takayuki Fujita, Kazusuke Maenaka, *Series-connected Piezoelectric MEMS Energy Harvester for Voltage Multiplication*
12:30-12:50	T3-A4 Yasemin Engür, Hasan Ulusan, Halil Andac Yigit, Salar Chamanian, Haluk Kulah, *13.56 MHz Mixed Mode Rectifier Circuit for Implantable Medical Devices*	T3-B4 David Gibus, Pierre Gasnier, Adrien Morel, Sébastien Boisseau, Adrien Badel, *Nonlinearities Influence on Performances of a Strongly-coupled Piezoelectric Generator for Broadband Vibration Energy Harvesting*
12:50-13:10	T3-A5 Nunzio Pucci, Christopher Kwan, David Yates, Paul Mitcheson, *Multi-Megahertz IPT Systems for Biomedical Devices Applications*	T3-B5 Anthony P Taylor, Luis F Velásquez–García, *Low-cost, Fully 3D-Printed, Magnetically Actuated, Miniature Valve-less Liquid Pumps*

Lunch break (13:10-14:20)

Thursday, 5th December

Thematic session T4-A (14:20-16:00)

	T4-A Biochemical and bio-inspired power/energy systems Power electronics and energy management circuits (Chair: Paweł Knapkiewicz)	T4-B Mechanical energy harvesting – Electrostatic Motors/generators, pumps and actuators (Chair: Takayuki Fujita)
14:20-14:40	T4-A1 Alessandro Di Michele, Francesco Cottone, Luca Gammaitoni, Luigi Sforna, Fabio Franciolini, Luigi Catacuzzeno, *Extracting and Harvesting Energy from a Biological Cell*	T4-B1 Chia-Chun Hsieh, Yi Chiu, *Design and Fabrication of a Cylindrical Intracardiac Electret Energy Harvester for Leadless Pacemakers*
14:40-15:00	T4-A2 Kohei Fujibe, Takayuki Fujita, Hiroki Uchida, Koki Yamamoto, Adrien Badel, Fabien Formosa, Kensuke Kanda, Kazusuke Maenaka, *Variable Load Resistance by Using CdS Analog Linear Optical Coupler for Automated Measurement of Capacitive Energy Harvester*	T4-B2 Kasidis Kittipaisalsilpa, Takashi Kato, Yuji Suzuki, *Effect of Impurity/Humidity on Liquid-crystal-enhanced Electret Vibration Energy Harvester*
15:00-15:20	T4-A3 Naida Hodzic, Dimitri Galayko, Sang-Woo Kim, Philippe Basset, *Unstable Charge-pump for Signal Rectification of Sliding Tribo-electret Generators with Interdigitated Grating Electrodes*	T4-B3 Hiroki Uchida, Koki Yamamoto, Takayuki Fujita, Adrien Badel, Fabien Formosa, Kensuke Kanda, Kazusuke Maenaka, *Start-up Acceleration Reduction of Electrostatic Vibration Energy Harvester with Narrow Air-gap Structure*
15:20-15:40	T4-A4 Peter Spies, M. Pollak, V.-P. Torvinen, H. Zessin *Multi-Source Energy Harvesting for IoT Applications*	T4-B4 Hoang Hung Nguyen, Haruhiko Asanuma, Le Van Minh, Hiroyuki Oguchi, Gaël Sebald, Hiroki Kuwano, $Pb_{52}(Zr,Ti)_{48}O_3$ *Ferroelectric Dipole Electret Exploiting Surface Pillar Array Structure for Electrostatic Vibration Energy Harvesters*
15:40-16:00	T4-A5 Tao Wen, Yu Shi, Yu Jia, *Vibration Energy Harvesting for Information Transmission on Offshore Wind Turbine Blade*	T4-B5 Chikako Sano, Manabu Ataka, Gen Hashiguchi, Hiroshi Toshiyoshi, *Electret Assisted Low-power Bidirectional Electrostatic Microspeakers*

Transfer to Wieliczka and Salt Mine sightseeing (16:30-19:00)

Conference Gala Dinner at Salt Mine „Wieliczka” (19:00-23:00)

Friday, 6th December

Plenary session (8:30-9:10), Chair: Katarzyna Zakrzewska

8:30-9:10	Chengkuo Lee, *Invited talk 4*

Technical break (9:10-9:20)

Thematic session T5 (9:20-11:00)

	T5-A Thermoelectric energy-harvesting Other related research (Chair: Shad Roundy)	**Focused Session 3: Polish-Singaporean session** (Chair: Rafał Walczak)
9:20-9:40	T5-A1 Qingshuo Wei, M. Mukaida, K. Kirihara, S. Horike, *Conducting Polymer Electrodes in Electrochemical Cells for Waste Heat Harvesting*	F3-1 Hao Wang, Shuting Liu, Tianyiyi He, Shurong Dong, Chengkuo Lee *A Switchable Fabric-triboelectric Nanogenerators (SF-Tengs) Profile Sensing Application*
9:40-10:00	T5-A2 Vida Barati, Javier Garcia Fernandez, Kevin Geishendorf, Lauritz Ule Schnatmann, Michaela Lammel, Alexander Kunzmann, Nicolas Perez, Guodong Li, Gabi Schierning, Kornelius Nielsch, Heiko Reith, *Thermoelectric Characterization Platform for Electrochemical Deposited Thick Films*	F3-2 Bowei Dong, Qiongfeng Shi, Tianyiyi He, Chengkuo Lee, *Characterization of Aluminum Nitride (AlN) Photonic Modulator as Function of High Voltage from Textile Triboelectric Nanogenerator (TENG)*
10:00-10:20	T5-A3 Shrikant Saini, Akira Yonamine, Ryoma Nishio, Izuki Matsumoto, Tomohide Yabuki, Koji Miyazaki, *Hybrid-halide Perovskite Thin Films for Thermoelectric Application*	F3-3 Dihan Hasan, Jianxiong Zhu, Hao Wang, Othman Sulaiman, Mahmut Sami Yazici, Tomasz Grzebyk, Rafal D. Walczak, Jan A Dziuban, Chengkuo Lee, *Finger Triggered High-voltage Ion Mobility for Gases Identification Based on Triboelectric Power Source*
10:20-10:40	T5-A4 Aditya S Dutt, David A Lara, Vida Barati, Guodong Li, Javier Garcia, Nicolas Perez, Heiko Reith, Gabi Schierning, Kornelius Nielsch, *Micro Thermoelectric Coolers for Bio-medical Applications*	F3-4 Tomasz Grzebyk, Monika Bigos, Anna Górecka-Drzazga, Jan Dziuban, Dihan Hasan, Chengkuo Lee, *MEMS Ion Sources for Spectroscopic Identification of Gaseous and Liquid Samples*
10:40-11:00	T5-A5 Zhumei Sun, Luis Fernando Velasquez-Garcia, *Additively Manufactured, Miniature Multi-emitter Ionic Wind Pumps*	F3-5 Bartosz Kawa, Krzysztof Śliwa, Rafał Walczak, Chengkuo Lee, *Inkjet 3D Printed Vibrational Energy Harvester*

Refreshment and coffee break (11:00-11:30)

Thematic session T6 (11:30-13:10)

	T6-A RF, inductive and acoustic power transfer Other related research (Chair: Piotr Jasiński)	**T6-B Mechanical energy harvesting - Electrostatic** (Chair: Eric Yeatman)
11:30-11:50	T6-A1 Mike Hayes, *European Infrastructure Project EnABLES Powers Internet of Things Feasibility Studies*	T6-B1 Ulises Tronco Jurado, Suan Hui Pu, Neil M. White, *Grid of Hybrid Nanogenerators for Boosting Ocean Wave Impact Energy Harvesting Self-powered Applications*
11:50-12:10	T6-A2 Nicolas Garraud, Baptiste Alessandri, Pierre Gasnier, David Arnold, Sébastien Boisseau, *Optimization of a Magnetodynamic Receiver for Versatile Low-frequency Wireless Power Transfer*	T6-B2 Hemin Zhang, Dimitri Galayko, Philippe Basset, *On the Harvesting Efficiency Improvement for the Diode-bridge Rectifiers Conditioning Triboelectric Nanogenerators*
12:10-12:30	T6-A3 Md Abdul Halim Miah, Joseph M. Samman, Spencer E. Smith, David P. Arnold, *Piezoceramic Electrodynamic Wireless Power Receiver Using Torsion Mode Meandering Suspension*	T6-B3 Massimo Mariello, Elisa Scarpa, Luciana Algieri, Francesco Guido, Vincenzo Mastronardi, Antonio Qualtieri, Massimo De Vittorio, *Mechanical Energy Harvesting through a Novel Flexible Contact-separation Mode Triboelectric Nanogenerator based on Metallized Porous PDMS and Parylene*
12:30-12:50	T6-A4 Akshayaa Pandiyan, Michail Kiziroglou, David Boyle, Steven Wright, Eric Yeatman, *Optimal Energy Management of Two Stage Energy Distribution Systems Using Dynamic Clustering*	T6-B4 Yu Jia, Ghislain Moubarak, Yu Shi, Senthil J Ponnudurai, Martin Jackson, *Inherently Broadband-Resonant Mechanism for Vibration Energy Harvesting: A First Proof-of-concept Experimental Validation*
12:50-13:10	T6-A5 Michail Kiziroglou, Steven Wright, Eric Yeatman, *Shaped Coil-core Design for Inductive Energy Collectors*	T6-B5 Trilochan Bhatta, Pukar Maharjan, Jae Yeong Park, *All-Direction In-Plane Magnetic Repulsion-Based Self-powered Arbitrary Motion Sensor and Hybrid Nanogenerator*

Closing Ceremony including Awards Ceremony (13:10-13:30)

Lunch (13:30-15:00)

Poster session / PowerMEMS in Action

Materials for energy conversion and storage

P1-1	Jihun Choi, Sangmin Jeon, *Piezoelectric Coefficient of Single Polymer Nanowire Measured on Quartz Tuning Fork*
P1-2	Hansol Lee, Sangmin Jeon, *Pencil-Drawn Moisture-to-Electric Energy Transformation Device*
P1-3	Quansheng Guo, Bhuvanesh Srinivasan, David Berthebaud, Takao Mori, *Processing of Materials for Efficient Thermoelectric Devices*
P1-4	Junjie Shi, Stephen Beeby, *PDMS-ZnO Composite Textile Ferroelectret for Human Body Energy Harvesting*
P1-5	Anna Kusior, Paweł Nieroda, *Copper Selenide as a Promising Semiconductor for Thermoelectric Conversion*
P1-6	Pawel Nieroda, Anna Kusior, *Synthesis and Thermoelectric Properties of Cu1.8S*
P1-7	Karolina Cysewska, Jakub Karczewski, Marcin Łapiński, Maria Rybarczyk, Piotr Jasiński, Sebastian Molin, *Electrosynthesized Graphene Oxide-transition Metaloxide/Hydroxideshybridsfor Efficient Oxygen Evolution Reaction in Alkaline Electrolyzers*
P1-8	Sebastian Molin, Jakub Karczewski, Bartosz Kamecki, Aleksander Mroziński, Piotr Jasiński, *Fabrication and Characterization of Functional Electroceramic Layers for Energy Conversion Devices*

Mechanical energy-harvesting

Electromagnetic

P2-1	Pierre Gasnier, Baptiste Alessandri, Thomas Fa, Emmanuelle Pauliac-Vaujour, Sébastien Boisseau, *Modeling and Characterization of a High-Efficiency, cm-scale and Low Velocity Airflow-driven Harvester for Autonomous Wireless Sensor Nodes*
P2-2	Liuqing Wang, Dibin Zhu , *A Flapping Airflow Energy Harvester with Flexible Wing Sections*
P2-3	Yan Fang, Yunfei Li, Manjuan Huang, Huicong Liu, Tao Chen, Gang Tang, Lining Sun, *An Efficient Electromagnetic Wind Energy Harvester for Self-Powered Wireless Sensor Node*
P2-4	Takara Kosaka, Arata Masuda, *An EPM-based Variable Stiffness Oscillator for Vibration Energy Harvesting*
P2-5	Kankana Paul, Dhiman Mallick, Saibal Roy, *Improved Performances of Wideband MEMS Electromagnetic Vibration Energy Harvesters using Patterned Micro-magnet Arrays*
P2-6	Weihan Xu, Anxin Luo, Yulong Zhang, Yan Lu, Fei Wang, *A Voltage Multiplier Rectifier Circuit with Configurable Voltage Conversion Ratio (VCR) for Rotary Electromagnetic Energy Harvester*
P2-7	Gleb Demin, Nikolay Djuzhev, Roman Andrushin, Tatyana Ryndina, Anna Dedkova, Aleksei Smirnov, Pavel Znatkov, *Prospects of Electromagnetic Energy Harvesting in a Combined Structure of Broadband Metamaterial Absorber with a Magnetic Tunnel Junction Having Tunnel*
P2-8	Masahiko Ito, *Prototyping of Power Supply for Vibration Condition Monitoring Modules using a Magnetostrictive Vibration Energy Harvester*

Electrostatic

P2-9	Yuya Tanaka, Noritaka Matsuura, Hisao Ishii, *Enhancement of Output Power in Self-Assembled Electret-Based Vibrational Energy Generator: Control of Molecular Orientation*
P2-10	Haiping Yi, Yun Liu, Kai Tao, *Micro Spherical Wave Power Generator with Origami-structured Double-helix Multifold Electrets*
P2-11	Noritaka Matsuura, Hisao Ishii, Yuya Tanaka, *Stability Improvement against Light Irradiation by Dye Doping In Self-assembled Electret-based Vibrational Energy Harvester*
P2-12	Tomoya Miyoshi, Yuki Tanaka, Yuji Suzuki, *Effect of Natural Frequency of Rotational Electret Energy Harvester for Human Walking*
P2-13	Hiroaki Honma, Hiroshi Toshiyoshi, *Power Enhancement through Reduced Stray Capacitance by Airborn Electrical Interconnection for MEMS Electrostatic Vibrational Energy Harvester*

Piezoelectric

P2-14	Nathan Jackson, *Bistable PiezoMEMS Energy Harvester with varying Magnetic Configurations*
P2-15	Angela Porcar-Climent, Nathan Jackson, *Rolling Mass for Wide Bandwidth Vibration Energy Harvesting*
P2-16	Imrich Gablech, Jaroslav Klempa, Jan Pekárek, Petr Vyroubal, Jan Kunz, Pavel Neužil, *Aluminum Nitride Based Piezoelectric Harvesters*
P2-17	Xutao Mei, Shengxi Zhou, Bo Yang, Tsutomu Kaizuka, Kimihiko Nakano, *The Centrifugal Softening Effect of an Inverse Nonlinear Energy Harvester in Low-frequency Rotational Motion for Enhancing Performance*
P2-18	Gustav Forsberg, Gábor Geréb, Johan Bjurström, Cristina Rusu, Per Lundgren, Stephan Tiedke, *Piezoelectric Energy Harvesting For Rotating Systems*
P2-19	Qiu Zheng, Le Van Minh, Hiroki Kuwano, *Fatigue Investigation of SUS430 and AlN/SUS430/AlN Hetero-layered Foils for Vibration Energy Harvesters*
P2-20	Agin Vyas, Ruben van den Eeckhoudt, Qi Li, Gabor Gereb, Anderson Smtih, Cristina Rusu, Per Lundgren, Peter Enoksson, *Towards Integrated Flexible Energy Harvester and Supercapacitor for Self-powered Textile Sensors*
P2-21	Mingming Zhang, Junjie Shi, Steve Beeby, *Improved Charge Stability in PTFE Coatings for PDMS Ferroelectrets*
P2-22	Yang Kuang, Meiling Zhu, *Impedance-based Finite Element Modelling of a Highly-coupled and Pre-stressed Piezoelectric Energy Harvester*
P2-23	Ryo Ichige, Kuriyama, Umino, Tsukamoto, Hashikura, Yamada, Takaaki Suzuki, *Size Optimization of Metamaterial Structure for Elastic Layer of a Piezoelectric Vibration Energy Harvester*
P2-24	Kosuke Nakamura, Arata Masuda, Chisato Sawai, *Modeling and Analysis of a Piezoelectric Stick-slip Energy Harvester*
P2-25	Nadeem Tariq Beigh, Pranay Singh Azad, Prem Parkash, Dhiman Mallick, *High Performance, Nonlinear Piezoelectric MEMS Energy Harvesting from Low-threshold Mechanical Vibrations*
P2-26	Jan Pekárek, Imrich Gablech, Jaroslav Klempa, Vojtěch Svatoš, Michael Schneider, Pavel Neužil, *Aluminum Nitride With High d33 Piezoelectric Coefficient for MEMS Applications*
P2-27	Alexis Brenes, Dae Su Kim, Elie Lefeuvre, Namsu Kim, Hyung-Won Kang, Chan-Sei Yoo, Chae Il Cheon, Seung Ho Han, *Towards the Unification of Material-level and System-level Approaches: Nonlinear Characterization of Hard and Soft-PZT Energy Harvesters*
P2-28	Julien Le Scornec, Benoit Guiffard, Raynald Seveno, Vincent Le Cam, *Hybrid polymer/piezoelectric oxide bilayer films for low frequency energy harvesting*
P2-29	Namanu Panayanthatta, Laurent Montes, Edwige Bano, Carlo Trigona, Roberto La Rosa, *Three terminal piezoelectric energy harvester based on novel MPPT design*

Triboelectric

P2-30	Hiroshi Tani, Mutsuki Sugimoto, Kazuhisa Fushihara, Yukio Nakao, Renguo Lu, Shinji Koganezawa, Norio Tagawa, *Energy Harvesting from Triboelectric Nanogenerator attached Inside Rolling Tire*
P2-31	Watcharapong Paosangthong, Russel Torah, Steve Beeby, *Textile Manufacturing Compatible Triboelectric Nanogenerator with Alternating Positive and Negative Freestanding Grating Structure*

P2-32	Tianyiyi He, Hao Wang, Chengkuo Lee, *Current-Enhanced Self-Sustainable Wearable Triboelectric Textile System for Healthcare Monitoring and Rehabilitation Applications*
Other	
P2-33	Bao Quoc Ta, Einar Halvorsen, *Vibration-powered Pressure Sensor*
P2-34	Yukiya Tohyama, Hiroaki Honma, Noboru Ishihara, Hidehiko Sekiya, Hiroshi Toshiyoshi, Daisuke Yamane, *Energy Harvesting from Non-stational Environmental Vibrations using a Voltage-Boost Rectifier Circuit*
P2-35	Tatsuhiko Sugiyama, Takuma Ishiguro, Yasushi Shibata, Hiroshi Toshiyoshi, Gen Hashiguchi, *Wide Frequency Characteristic of Electret MEMS Vibration Energy Harvesters*
P2-36	Ali Mohammadi, Chris Bowen, *Time Domain Multiplexing of Frequency Up-Converted Piezoelectric Energy Harvester in MEMS*
Thermal management, thermal logic, and nanoscale thermal effects **Thermo- and pyroelectric energy-harvesting**	
P3-1	Xiawa Wang, Walker Chan, Peter Fisher, Renrong Liang, Jun Xu, *Thermal Insulation Design of Portable Radioisotope Electrical Generators*
P3-2	Alihossein Nikkhah, Albert Tessier-Poirier, Omid Abouali, Luc Fréchette, *Investigation of the Liquid Plug Friction Force in the Self-Oscillating Fluidic Heat Engine (SOFHE)*
P3-3	Ryoto Yanagisawa, Patrick Ruther, Oliver Paul, Masahiro Nomura, *Development of Planar-type Silicon Thermoelectric Energy Harvester with Phononic Crystal Nanostructures by Nanoimprint Lithography*
P3-4	Quentin Micard, Giacomo Clementi, Ausrine Bartasyte, Paul Muralt, Gugliemo G. Condorelli, Graziella Malandrino, *Functional Study of $Bi(1-x)DyxFeO_3$ Thin Film Grown by MOCVD on Single Crystal*
Batteries, super-capacitors, and chemical energy storage **RF, inductive and acoustic power transfer** **Energy-autonomous wireless sensors for IoT**	
P4-1	Nicholas Hillier, Sheng Yong, Steve Beeby, *Calendar Life of Textile Supercapacitors*
P4-2	Piotr Śliwiński, Karolina Laszczyk, Bartosz Kozakiewicz, PDMS-encapsualted supercapacitor with an electrolyte being a liquid
P4-3	Hantian Zhang, Zichao Zhang, Yishen Xue, Kai Tao, Yang Yang, *A High Performance Flexible Microfluidic Fuel Cell Using H_2O_2 as Sole Reactant*
P4-4	Ioannis Nikiforidis, Paul Mitcheson, *Design and Modelling of Class EF Inverters for Wireless Power Transfer Applications*
P4-5	Bibhu Kar, Ulrike Wallrabe, *Performance Enhancement of an Ultrasonic Power Transfer System through a Tightly Coupled Solid Media Using aKLM Model*
P4-6	Akshayaa Pandiyan, Roberto La Rosa, Michail Kiziroglou, Eric Yeatman, *Understanding Far Field Ultrasonic Power Transmission for Automobile Sensor Networks in Free Space*
P4-7	Atsunobu Samaru, Meng Su, Kim Beom Joon, *Hybrid Membrane Consisting of Carbon Nanotubes and Silk for Sensitive and Compact Humidity Sensor*
P4-8	Francesco Madaro, Iman Mehdipour, Francesco Rizzi, Francesco Guido, Denis Desmaele, Massimo De Vittorio, *AlN-based Flexible Harvester for Self-Powered Iot Node for Exhaust Gas Characterization*
P4-9	Qifan Gao, Ling Bu, Sixing Xu, Xiaohong Wang, *Design and Implementation of an OPUMP Based Interface Circuit for Improving the Output Power of Frequency Up Conversion Piezoelectric Energy Harvester*
Other related research	
P5-1	Xiujun Yue, Jessica Grzyb, Akaash Padmanabha, James Pikul, *A Minimal Volume Hermetic Packaging Design for High Energy Density Micro Energy Systems*
P5-2	Qiongfeng Shi, Zixuan Zhang, Chengkuo Lee, *Multi-Functional Human Machine Interface (HMI) Using Flexible Wearable Triboelectric Nanogenerator for Diversified Interacting Applications*
P5-3	Qiongfeng Shi, Chengkuo Lee, *Bio-Mimetic Flexible Wearable Interface with Spider-Net Coding Based On Self-Sustainable Triboelectric Mechanism*
P5-4	Sunija Sukumaran, *Processing of Hybrid SMA/P(VDF-Trfe) Composite for Energy Harvesting Application*
P5-5	Anatoly Kolosko, Sergei Filippov, Eugeni Popov, *Features of Evaluating Properties of Field Emitters Using Effective Parameters*
P5-6	Eugeni Popov, Sergei Filippov, Anatoly Kolosko, *Complex Methodology for Studying the Emission Properties of Multi-tip Field Cathodes with Online Data Processing*
P5-7	Piotr Szyszka, Tomasz Grzebyk, Anna Górecka-Drzazga, Jan A. Dziuban, Dihan Hasan, Chengkuo Lee, *Towards Portable MEMS Mass Spectrometer*
P5-8	Gleb Demin, Nikolay Djuzhev, Ilya Evsikov, Petr Glagolev, Maksim Makhiboroda, Nikolay Chkhalo, Nikolay Salashchenko, *Formation of a Field Emission Array for the Efficient Conversion of Electron Energy into X-Ray Radiation for the Maskless X-Ray Lithography*
P5-9	Agnieszka Podwin, Adrianna Graja, Dawid Przystupski, Danylo Lizanets, Patrycja Śniadek, Rafał Walczak, Jan Dziuban, *Lab-on-chip platform as a nanosatellite payload solution for biomedical experiments in outer space*
P5-10	Paweł Knapkiewicz, Tomasz Grzebyk, Jan Dziuban, *Micro-powered rubidium vapor MEMS cell for cold atom spectroscopy*
P5-11	Binh Duc Truong, Caleb Roundy, Robert Rantz, Shad Roundy, *Energy Harvesting and Wireless Power Transfer in a Unfied System for Wearable Devices*
P5-12	Ricardo Escalona-Villalpando, Alicia Sandoval-García, Shelley Minteer, Luis-Gerardo Arriaga, Janet Ledesma-García, *Improving a self-powered glucose biosensor system using a microfluidic design*
PowerMEMS in Action	
P6-1	Jie Pu, P, Yu Jia, *Energy Harvesting from Kinetics of Prosthetic Leg*
P6-2	Miklós Szappanos, János Radó, Péter Harmat, János Volk, *Self-Powered Vibration Analyser*
PowerMEMS in Action - presentations	
P6-1	Jie Pu, Yu Shi, Yu Jia, *Energy Harvesting from Kinetics of Prosthetic Leg*
P6-2	Miklós Szappanos, János Radó, Péter Harmat, János Volk, *Self-Powered Vibration Analyser*
T4-A5	Tao Wen, Yu Shi, Yu Jia, Vibration Energy Harvesting for Information Transmission on Offshore Wind Turbine Blade
F3-5	Bartosz Kawa, Krzysztof Śliwa, Rafał Walczak, Chengkuo Lee, Inkjet 3D printed vibrational energy harvester