## International Conference on Materials Science and Engineering, September 16-18, 2019 at Melbourne, Australia.

#### **WELCOME TO MATERIALS SCIENCE CONFERENCE 2019**

Materials Oceania organizing committee invites the participants across the globe to attend its annual flagship conference, International Conference on Materials Science and Engineering which is going to take place during September 16-18, 2019 at Melbourne, Australia.

Organized around the theme "Fuelling the core of innovations in Materials Science", Materials Oceania 2019 is comprised of various sessions designed to offer comprehensive symposiums that address current issues in the field of Materials Science and provides fantastic opportunity to network with your peers from academia and industry.

Materials Oceania 2019 delivers unlimited opportunities for making business deals, product enhancements, cutting edge solutions for improving and elevating company's business and partnership. The conference provides an unique platform for all the leading industry professionals, institutional investors, capitalists, corporate investors and business development executives to have private One-to-One meetings with elite business representatives which increases the chances of marketing in this networking world.

### CONNECTING WOMEN IN MATERIALS SCIENCE THROUGH MATERIALS OCEANIA CONFERENCE

Eliminating gender bias in universities requires immediate, overarching reform and decisive action by university administrators, professional societies, government agencies and congress. Materials Oceania is committed to promoting gender equality in regional, national, and global levels and mainstreams a gender perspective.

We recognise that women participation at international level conferences is lacking. Thus, the vital contributions and revelations made by women in materials science regularly stay underperceived. Materials Oceania Organising Committee will endeavour to build a conference program that embraces different perspectives based on gender diversity as well as cultural diversity to ensure our delegates have the greatest opportunity for engagement, collaboration and participation.

A special session has been planned during the materials science conference to pay tribute to the accomplishments of women in Materials Science field, inspire current early stage researchers to become innovators in the field, discuss issues facing by women in the materials science and engineering professions and provide girls and women with inspiring role models that could lead them to pursue careers in Materials Science.

We encourage all the women and men participants of Materials Oceania to take part in this special session and support us in promoting gender equity.

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#### **Invited Session 2: Energy and Environment Materials**

**Session Chair**: Barbara Szpunar, University of Saskatchewan, Canada **Session Co-Chair**: Hiromitsu Takaba, Kogakuin University, Japan

Time: 13:40-18:00 Tuesday September 17, 2019 Location: State 1, Pullman Melbourne Albert Park

13:40-14:00	Comparison of structural stability of $\beta$ silcon carbide and thoria Barbara Szpunar, University of Saskatchewan, Canada
14:00-14:20	Molecular modeling of stability and emission properties of halide perovskites  Hiromitsu Takaba, Kogakuin University, Japan
14:20-14:40	Enhancement of redox mediator effect at air electrode for rechargeable Li-O <sub>2</sub> batteries
	Morihiro Saito, Seikei University, Japan
	Colossal reversible barocaloric effects in plastic crystals
14:40-15:00	Pol Lloveras, Polytechnic University of Catalonia, Spain
15:00-15:20	Guest Li <sup>+</sup> ion conductors based on NaI-NaBH <sub>4</sub> and their potential use for all-
10.00 10.20	solid-state batteries
	Reona Miyazaki, Nagoya Institute of Technology, Japan
15.00 15.40	Nanomaterials for energy conversion and storage
15:20-15:40	Nasir Mahmood, RMIT University, Australia
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15:40-16:00	Heterostructued titanium dioxide photocatalyst
	Chiaki Terashima, Tokyo University of Science, Japan
	COFFEE BREAK and POSTER PSRENTAIONS
16:00-16:40	Mercure Lounge
16:40-17:00	Nanocomposite catalysts for reduction of 4-nitrophenol
-	Piotr Cyganowski, Wroclaw University of Science and Technology, Poland
17.00.17.70	Hydrogen production in a novel microbial electrolysis coupled anaerobic
17:00-17:20	digestion reactor
	Thangavel Sangeetha, National Taipei University of Technology, Taiwan
	Two dimensional materials preparation and their properties of oxygen evolution
17:20-17:40	reaction
	Chuanbao Cao, Beijing Institute of Technology, China