

# Spray-On Photovoltaic Solar Cell Lab

University of Michigan-Shanghai Jiao Tong University Joint Institute

## • About the Lab •

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The laboratory for the “Spray-On Photovoltaic Solar Cells” at the University of Michigan-Shanghai Jiao Tong University Joint Institute focuses on fundamental study on thin films and on the fabrication and testing of emerging thin film solar cells such as perovskite solar cells.

Web: <http://pv.sjtu.edu.cn/index.html>

## • About the Team •

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Morteza Eslamian

Associate Professor

### Education

Ph.D. Mechanical Engineering, University of Toronto, Toronto, ON (2006)

M.Sc. Mechanical Engineering, Sharif University of Technology, Tehran, Iran (2000)

B.Sc. Mechanical Engineering, Sharif University of Technology/Shiraz University, Iran (1998)

### Work Experience

2013 – present Associate Professor, University of Michigan – Shanghai Jiao Tong University Joint Institute, Shanghai, China

2011 – 2013 Assistant Professor, School of Engineering and Computing Sciences, Texas A&M University- Corpus Christi, TX

2008 – 2011 Research Associate, Ryerson University, Toronto, ON

2007.4 – 2007.8 Postdoctoral Research Fellow, Swiss Federal Institute of Technology ETH Zurich, Switzerland

2006 – 2007 Postdoctoral Research Fellow, Department of Chemical Engineering, University of Toronto.

2002 – 2006 Graduate Research Assistant, Department of Mechanical and Industrial Engineering, University of Toronto, ON

2000 – 2002 Research Engineer, Institute for Surface Effect Vehicles, Shiraz, Iran

1998 – 2000 Graduate Research Assistant, Department of Mechanical Engineering, Sharif University of Technology, Tehran, Iran

### Awards

2014 Oriental Scholar

### Research

Micro and Nano Energy Conversion and Transport: Thin film solar cell fabrication and modeling, Heat transfer and thermodiffusion in nanofluids and complex mixtures, Micro and nano-particle fabrication and modeling.

## • Research Fields •

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- High speed imaging of liquid thin films made by spray and spin coating
- Fabrication and characterization of thin films
- Fabrication and characterization of solar cells

## • Responsibility •

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Participate in experiments, analysis, characterization, and writing of papers and reports.

### • Eligibility •

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- In principle, we recruit junior and senior students
- Hold at least a 2.5 GPA on a 4.0 scale
- Students of non-English speaking countries must provide English language proficiency certificate, IELTS no less than 6.0, and TOEFL no less than 90 points. If you are in the college for English teaching programs, please provide relevant certificates
- Have at least one prior research experience
- Background in Chemical/Mechanical engineering or Physics and chemistry
- Familiarity film thin films and solar cells is a big plus

### • Additional Financial Support •

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N/A

### • Contact •

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