# **Poster Programme**

## Wednesday, April 2, 2025

## **Poster Session A**

Chair: Sophie Pain, University of Warwick

- P1 The Impact of Crystallinity in Low-cost Donor Blends on Charge Generation for Organic Photovoltaics Keren Ai, Imperial College London
- P3 Development of fully non-toxic ink for the scalable deposition of perovskite thin layers **Ehsan Rezaee,** University of Surrey
- P5 Low synthetic complexity and scalable donor polymers for organic solar cells Martina Rimmele, Imperial College London
- P7 Development of Novel Photovoltaic Devices Combining Ferroelectric Nanostructures with Perovskite Solar Cells
  Raphael Viana, Queen Mary University of London
- P9 Photovoltaics for Nigerian Rice Processing Social Perspective Abdul-Azeez Yusuf, University of Exeter
- P11 Correlation of soiling losses of distinct mega cities considering accumulation variance Ali Alqahtani, University of Exeter
- P13 Theoretical Study on the Effect of Doped Carbon Back Electrode on Lead-Free and Hole Transport-Free in CsSnGel<sub>3</sub> -Based Concentrating Perovskite Solar Cells
  Mai Alharbi, University of Exeter
- P15 High-Performance Indoor Photovoltaic Mini-Modules with Carbon Electrodes for Sensor
  Power Generation
  Sahil Verma, St Andrews University
- P17 ZnO nanorod hemispherical light scatters for thin film solar cell applications **Yongtao Qu,** Northumbria University
- P19 Deposition and Characterization of RF Magnetron Sputtered High Mobility ITiO for PV Devices
  Ana Jurado Estrada, Crest Loughborough University
- P21 Optical dependency characterization of semi-transparent solar module for Agrivoltaics **Yusuf Nadabo Chanchangi,** University of Exeter
- P23 Enhancing Non-fullerene Organic Photovoltaics Performance via Prethermal Treatment: Interface Morphology Optimization and Trap Suppression
   Enas Moustafa, Imperial College London

P25 Synthesis and characterization of Ce-doped BaSnO3 for performance enhancement of concentrated perovskite solar cells Nouf Alkathran, University of Exeter

## Thursday, April 3, 2025

## **Poster Session B**

## Chair: Nigel Mason, PV Consulting

- P2 Mind the sub-gap: exploring the impact of sub-gap features on the thermodynamics of disordered photovoltaics.
  Drew Riley, Swansea University
- P4 Building Integrated Photovoltaics (BIPV): A Comprehensive Review of Architecture, Technical Advancements, Lifetime Cost and Industrial Progress **Qandeel Rehman,** University of Engineering and Technology
- P6 Ambient and Solution Processable Organic Photovoltaic for Indoor Application **Ram Datt,** Swansea University
- P8 Encapsulation of perovskite devices using UV-curable ink jetted materials Walter Stroud, University of Surrey
- P10 Proton Radiation Hardness of Solar Cells and Ion Beam Analysis Investigation by Experiments Performed using particle accelerators
   Pierre Couture, Surrey Ion Beam Centre
- P12 Complex formation of ferrocene derivatives with electron-transporting layers enables improved performance and photostability in organic solar cells **Zhuoran Qiao,** Imperial College London
- P14 Combining Machine Learning with Physics-based Models for Day-Ahead Solar
  Forecasting
  Rong Gu, Department of Engineering Science, University of Oxford
- P16 Evaluating Biochar-Based Carbon Electrodes in Printed Mesoscopic Perovskite Solar Cells Amy Neild, Newcastle University
- P18 Enhancing Energy Estimation for Floating Photovoltaic Systems Using Machine Learning Techniques
   Yiliao Zhou, University of Southampton
- P20 Perovskite Printing for Flexible Thin-Film Microgroove Modules Samual Ngombe, Specific Ikc

- P22 Accurate Yield Modelling of a Semi-transparent Façade Agri-PV System Lavanya Malarkannan, National Physical Laboratory
- P24 Understanding the growth kinetics of MAPbI3 thin films on metal oxide vs organic semiconductor charge extraction layers and their indoor photovoltaic properties.
  Edwin Pineda De La O, University of St Andrews
- P26 Advancements in Solar Spectral Irradiance Modelling for Photovoltaic Systems: A Machine Learning Approach Utilizing On-Site Data **Haoxiang Zhang,** University of Southampton