Flexible Perovskite Solar Technologies Day



July 27th 10.00 - 17.00

Aula Leonardo, Engineering Department, "Presidenza" building, second floor

10.00 - 13.00

CHOSE - SAULE Talks



Prof. Thomas Brown



Dr. Francesca De Rossi



Dr. Luigi Angelo Castriotta



Dr. Dávid **Forgács**



Mr. Felipe A. **Vinocour Pacheco**



Vivek Babu's PhD Viva

Perovskite on Flexible Foil: from Lab to Real-World Application









Perovskite Solar Cells for New Substrates and Indoor Photovoltaics

Prof. Thomas Brown - CHOSE Director

Thomas M. Brown investigated polymer OLEDs for his PhD at the Cavendish Laboratory, University of Cambridge. From 2001 – 2005 he developed OTFTs and E-Paper as Senior Engineer with Plastic Logic Ltd. In 2005 he was recipient of a "Re-entry" Fellowship awarded by the Italian Ministry of University and Research and is Associate Professor at the University of Rome-Tor Vergata where he founded the Centre for Hybrid and Organic Solar Energy, and is Associate Editor of Solar Energy. He is author of over 150 peer reviewed journal papers and 15 patents. His current research lies mainly in perovskite and organic semiconductor photovoltaics focusing on a variety of flexible substrates, light harvesting in low light indoor environments, and bio-hybrid devices including artificial retina models.





Flexible perovskite solar cells from sustainability to space: recent advances at CHOSE Dr. Francesca De Rossi – Senior Researcher

After her PhD degree in Telecommunications and Microelectronics Engineering on flexible dye solarcells, awarded by University of Rome 'Tor Vergata' in 2014, Dr. De Rossi spent nearly 4 years abroad,working as a Technology Transfer Fellow at SPECIFIC Innovation and Knowledge Centre, SwanseaUniversity (UK). She was part of the PV team led by Prof T.M. Watson, focusing on the upscaling ofprintable perovskite solar cells, and lead of the stability activity within his group. She is currently a fixedterm researcher (RTD-A), funded by the EU H2020 project APOLO, led by Prof F. Brunetti, on smartdesigned, fully printed flexible perovskite solar cells (https://project-apolo.eu/).

Perovskite Solar Cells & Modules on Inverted Structures: from Rigid to Flexible Devices

Dr. Luigi Angelo Castriotta - Post-Doctoral Researcher

Luigi Angelo Castriotta currently works as a post-Doctoral fellow at Tor Vergata Univeristy, focusing on flexible perovskite solar cells and modules. He got his Ph.D. in 2021 in Electronics Engineering from Tor Vergata University (Italy) as a Marie-Curie Fellow as part of the ITN MAESTRO; His background is in Chemistry, where he got his bachelor from the same University, in "Nanoscience and Nanotechnology" at UB (Spain) and in "Organic Molecular Electronics" at TUD (Germany) with 2 Masters. In 2023 he'll join Prof. Huang's group at the UNC (US), as a Global Marie-Curie Post-Doctoral Fellow, following his work on Perovskite-based solar device upscaling on flexible substrate.



The development of the first commercial applications of perovskite solar cells

Dr. Dávid Forgács - Director of Knowledge Management

Dr. Dávid Forgács has over 8 years of experience in third generation photovoltaics obtained at internationally recognized institutions, such as Fraunhofer-ISE, Opvius GmbH and University of Valencia. He joined Saule in 2017 as a scientist and has since then gradually expanded his involvement into a broad range of activities. With experience in marketing, fundraising, business and product development, intellectual property and project management, he is essentially a connecting point between technology, science and business. Having a general oversight on all activities at the company, he is the first point of contact for industrial partners interested in developing solutions powered by Saule's perovskite PV.

Upscaling of Tin-based Perovskite Solar Cells from Laboratory to Industry

Felipe A. Vinocour Pacheco - PhD. Researcher

M. Sc. in Chemistry, University of Costa Rica, 2016. Master's thesis on organometallic complexes as redox pair mediators in dye-sensitized solar cells.

Joined Saule Research Institute in 2021 as part of the DROP-IT project, working on lead-free perovskite solar cells with large-scale fabrication techniques on flexible substrates.





Perovskite on Flexible Foil: From Lab to Real-World Application

Vivek Babu - PhD. Researcher

Vivek Babu is currently completing his Ph.D. at Saule SA, affiliated with the University of Rome Tor Vergata. The project is under the European training network MAESTRO funded by the EU Horizon 2020 program. He received his M.Sc. degree from the Chemnitz University of Technology, Germany, and M.Tech. degree from Manipal Institute of Technology, India. His experience and knowledge in organic photovoltaic and large area deposition techniques helped him achieve significant developments in the field of organometal halide perovskite. The recent one is the implementation of a perovskite-powered tracking collar on European Bisons for wildlife conservation.