

*Dear Scienteens lab and Outreach training for Photovoltaic Scientists Team,*

*I wanted to take a moment to express my deepest gratitude for the opportunity to participate in the Outreach for Photovoltaics Scientists event (COST Action RenewPV CA21148). This experience was truly transformative, providing invaluable insights into science communication and an inspiring environment for collaboration and knowledge exchange.*

*The training provided a comprehensive framework for how to convey and explain "complex" scientific ideas in a way that is engaging, accessible, and impactful. It has not only expanded my understanding of outreach, but it has also given me a new perspective on how to effectively connect the science of photovoltaics with the public—especially teenagers—and how to inspire the next generation of scientists and innovators. In this regard, I would like to extend my special thanks:*

- To Jana Krier – I am truly grateful for the amazing organization and seamless execution of this event. Your attention to detail ensured that every session flowed smoothly. And of course, thank you so much for the morning coffee—it was a much-appreciated boost to start the day!*
- To Sebastien Elixander – Your support during the hands-on workshops was crucial, and your ability to manage both the scientific content and logistical aspects was nothing short of impressive. Your dedication to ensuring that every participant felt included and supported contributed significantly to the overall success of this event.*
- To Alexander Skinner – Your insights and contributions during the development of our workshop: "Sun2Hydro" were truly invaluable. Your experience and thoughtful suggestions played a key role in shaping our final project, ensuring that it was both scientifically rigorous and engaging for the audience (Let's make some bubbles!). I greatly admire your problem-solving approach, always balancing scientific accuracy with accessibility—even though, at times, we had to "kill our babies" along the way. Your ability to consider the participants' perspective and find innovative ways to make complex concepts more relatable and engaging was truly remarkable. Your input was instrumental in enhancing the effectiveness of our outreach efforts, and I genuinely hope we have the opportunity to collaborate again in the future.*
- To Louis Krieger – Your Speedway analogy for explaining the bandgap was a masterclass in how to simplify complex ideas through the use of relatable metaphors. The clarity and precision with which you explained how atomic orbitals evolve into conduction bands, and the importance of visualizing these concepts, was truly inspiring. The different LED bandgap measurement experiment you have suggested was particularly impactful, hands-on way to understand a concept that is often difficult for students to grasp. I am excited to incorporate this experiment into my own workshops, as I believe it has the potential to make the concept of the bandgap more tangible and intuitive for young learners. I hope that we can continue to exchange ideas and collaborate on future outreach initiatives, as your approach to science communication is truly inspiring.*
- To Elisabeth John – It was a pleasure to meet you and to discover our shared passion for making science more accessible and inspiring. The work you lead at Scienteens Lab is a testament to the power of experiential learning, and I greatly admire your vision for engaging young minds in scientific discovery. Your insights on the 80% rule—allowing students to explore and discover independently while providing the right level of guidance—were*

particularly valuable. I am inspired to incorporate this approach more deeply into my own educational initiatives. I believe that your experience and passion for fostering curiosity and critical thinking in young learners align perfectly with my vision for future outreach projects. I sincerely hope we can explore opportunities for collaboration, perhaps even through a future educational exchange between Scienteens Lab in Luxembourg and initiatives like Bojos per la Ciència - "Mad for Science" in Barcelona. I am certain that such a partnership would be mutually enriching and impactful for the future students involved.

(<https://www.fundaciocatalunya-lapedrera.com/en/madscience>) Mad for science stimulates talent and encourages the science and tech vocations of 1st and 2nd year baccalaureate students who are curious to find out more about research, through theoretical and practical courses taught by researchers at leading research centres in Catalonia.

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- To Phillip Dale – Your approach to science communication and outreach left a profound impact on me. The gravitational potential analogy for the bandgap was not only an elegant way to explain a complex concept, but also a powerful reminder of the importance of using relatable metaphors to make science more intuitive. Your ability to distil complex ideas into clear, engaging narratives is a rare skill, and I am inspired by your focus on crafting messages that are both scientifically rigorous and captivating. I deeply appreciate the way you emphasized the importance of connecting with the audience, tailoring the message to their level of understanding, and making the science behind photovoltaics both accessible and inspiring. Your passion for outreach is contagious, and I would be honoured to explore ways to collaborate with you in the future to develop innovative educational materials and workshops.

In general, it was a privilege to be part of such a diverse group of researchers, educators, and communicators. The knowledge exchange, the variety of perspectives, and the collaborative spirit made this event a truly enriching experience. The discussions on pedagogical strategies, audience engagement techniques, administrative planning for outreach initiatives, and the structuring of science communication was not only inspiring but also provided me with valuable insights.

Additionally, exploring topics such as optimizing photovoltaic materials and designing practical workshops on hydrogen production with solar energy has broadened my perspective and given me new ideas and approaches that I plan to integrate into my own outreach efforts.

This event reinforced the importance of bridging the gap between research and society. It is essential to communicate the science behind renewable energy in a way that is both accessible and inspiring, to motivate future generations to take an active role in sustainability. In particular, I found the following aspects to be especially valuable:

1. The structured approach to designing an outreach event, from initial concept to implementation and evaluation.
2. Funding strategies, as presented by Elisabeth John, emphasizing the importance of securing resources for long-term outreach projects.
3. The development of interactive educational materials, making photovoltaic concepts more accessible and engaging for various audiences.

Beyond the technical content, what I take away most from this event is the human connection with passionate individuals who are dedicated to making science accessible. It has been an incredibly

*enriching experience, and I hope this is just the beginning of more collaborations and knowledge-sharing in the future.*

*Please feel free to reach out, and I look forward to staying in close contact.*

*Kind regards,  
Jacob*