

LED Society

STEERING COMMITTEE ELECTION

Candidate application form

Title: Dr

Name: Sebastian

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Select the position you are applying for:

- President**
- Young researcher** (PhD degree awarded on [Click or tap to enter a date.](#))
- Ordinary member**

Biography:

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GoogleScholar: <https://scholar.google.de/citations?user=3HScfA8AAAAJ>

RG: <https://www.researchgate.net/profile/Sebastian-Kreutzer-2>

I am a luminescence-based geochronologist with an educational background in geography and dedication to data science. I completed my undergraduate studies in economics and geography at the University of Bayreuth in Germany. I also conducted my PhD in Bayreuth between late 2008 and early 2013 on palaeoenvironmental reconstructions of loess-palaeosol sequences using luminescence-dating methods. After a brief outside-academia excursion, I started my first post-doc at the Justus-Liebig University of Giessen (Germany), where I initially worked on an industry-university research project. In 2014, I joined the Archéosciences Bordeaux (former IRAMAT-CRP2A) laboratory in France as an expert in geochronology. During this time, in an environment of applied physics, my research focus shifted from luminescence-dating

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applications to more methodological developments of luminescence-dating methods and related data analysis. I left France in 2020 to pursue a Marie-Curie Individual Fellowship at Aberystwyth University (United Kingdom) about geochronological reference data. Since May 2022, I have been back in Germany and joined the luminescence group at the Ruprecht-Karl-University of Heidelberg. In March 2023, I will start my Heisenberg research group on geochronology and data science in Heidelberg.

Hobbies supposedly relevant to my candidacy: I am a founding member of the German luminescence band "Unbleachables". We had our last concert in 2018 due to rehearsal time constraints.

Motivation: *(Please describe your vision for the LED Society, the contribution you would like to make, etc.)*

I came to luminescence dating by accident in 2008 when I was handed over a job posting printed on an a4 sheet. The notice advertised a PhD position that included some dating work. Back then, I was somewhat unaware of what I was applying for, but it sounded pretty like science fiction. Exciting!

Today and 15 years longer in the game, I am still fascinated by the enormous diversity of the subject that combines many different disciplines and is never short of new challenges.

In 2023, luminescence dating as a chronological tool has matured, and its datings are immensely in demand in geoscience and archaeology. A new study covering the Quaternary seldom comes without luminescence or electron-spin resonance ages. However, trapped-charge dating is not only about dating applications but innovative research that pushes methodological boundaries, advances knowledge, and sets new standards that resonate outside disciplines. It certainly forms its own field that calls for representation and formal standing.

I sincerely believe that a LED society is critical to gaining a voice and providing a vital umbrella as a mature and self-carrying discipline. Today chronologists concerned with trapped-charge dating are scattered across various fields. They are part of distinct associations with very different aims where geochronology, particularly luminescence and ESR dating, seems to remain in the shadows. Therefore, creating a platform that spotlights dating and related research is pivotal. Its members' scientific and international diversity will undoubtedly be a plus because it brings different mindsets that stimulate creativity.

In my view, the new society should foster international exchange, organise international meetings, coordinate workshops, award prizes, support early-career scientists, and pick up bottom-up initiatives to host debates and work groups that address, for instance, questions of community-wide workflow guidelines. In other words, it should render a supportive platform where its members feel accommodated but not patronised.

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Setting up such an association is a tedious task. It requires a decisive agenda that balances different approaches and aims and acts in the interest of its majority. More importantly, it requires much leg work and transparent communication.

I present my candidacy for a position as an ordinary member of the steering committee, where I will pursue the establishment of our new society for the benefit of the entire luminescence and ESR dating community.

When I ask for your vote, I cannot promise perfection, but I pledge my dedication to the cause!

Thank you!