









## Diffusion Shortcourse / Workshop - October 06 - 10, 2025

We are pleased to announce an upcoming shortcourse / workshop on the

Application of diffusion studies to the determination of timescales in geochemistry and petrology (diffusion chronometry / geospeedometry)

to be held at the

Institut für Geowissenschaften, Ruhr-Universität Bochum, Germany

## October 06 - 10, 2025

This course is jointly offered by staff from Ruhr-Universität Bochum and Leibniz Universität Hannover as part of the joint Research Unit FOR 2881.

**Content:** This course is designed for petrologists, geochemists, volcanologists, and planetary scientists interested in extracting timescale information from rocks. Such information might include the residence times of magmas in reservoirs, the cooling or exhumation rates of rocks, the durations of terrestrial and extraterrestrial metamorphism (e.g., meteorite parent bodies), the duration of fluid flow (e.g., metasomatism by fluids/melts in the crust or mantle), and the evaluation and application of closure temperatures. The focus will be on high-temperature processes, making it relevant for those interested in high-temperature thermochronometry, diffusion chronometry, and geospeedometry. The course will run from Monday (06 October) till Friday (10 October), with a combination of lectures to introduce the topic and accompanying hands-on practical exercises. A more detailed course schedule and program will follow soon on our webpage

**Goals and expected profile of participants:** Previous experience with numerical modelling or programming is not required, but an interest in learning the rudiments of these tools is. One of the objectives of the course, however, is to demonstrate how much it is possible to accomplish without any or with very little programming. The basic information on diffusion that is required for carrying out such calculations will be provided, but this is not a course designed to cover all aspects of diffusion in minerals and melts.

In addition to instruction via lectures, a major component of the course will be hands on training to enable participants to "do your own" modelling. Participants will be expected to bring their own laptop computers with Excel and MATLAB installed on those. Knowledge of MATLAB is not required – instructions will be provided during the course. All instruction and exercises will be in English.

The course material will be designed for graduate students or postdocs starting off in the fields mentioned above, but participants with all levels of experience and expertise are welcome. To maintain the hands-on nature of the course, we expect to **restrict the number of participants** to around 30, to be given out on a first come first serve basis. Interested participants can express intention to register by sending an email containing a brief paragraph describing their background / reasons for wanting to participate to: maren.kahl@rub.de











**Registration and fees:** There are NO course fees as such. However, we will charge a fee of **150 Euros** to cover expenses for refreshments during the course and for some course materials. Upon receiving an acknowledgement that a place is available, you will receive further information for official registration and payment details.

Further information regarding course organization, travel and accommodation details, and computational requirements will soon be shared on our webpage [https://diffchron.ruhr-uni-bochum.de/news/].

Enquiries on scientific aspects / course contents: Sumit Chakraborty (<u>sumit.chakraborty@rub.de</u>), Ralf Dohmen (<u>ralf.dohmen@rub.de</u>), Maren Kahl (<u>maren.kahl@rub.de</u>).

Enquiries on organizational aspects: Maren Kahl (<u>maren.kahl@rub.de</u>), Science Program Coordinator of FOR 2881.