



The Automation and Control Institute at TU Wien is seeking applicants for a

PhD-Position (m/f/d):

“Optimal Charging of Discontinuous Annealing Furnaces in the Metals Industry”

You can expect:

Within the Complex Dynamical Systems Group (**Prof. Andreas Kugi**) you will develop together with an **internationally operating industrial research partner** methods for the optimal charging of discontinuous annealing furnaces used in the metals industry.

Tasks:

- Design of an interface for an available thermal model of a discontinuous annealing furnace
- Formulation and solution of mathematical optimization problems for the optimal charging of discontinuous annealing furnaces (selection, sequence and geometric positioning of products)
- Development of an algorithm for automatic optimal charging of discontinuous annealing furnaces and software programming
- Test of the developed strategies in simulations and on a test bench of the research partner

Your profile:

- Completed study (master level) in mathematics, control engineering, computer science, mechatronics, electrical engineering, mechanical engineering, process engineering
- Excellent analytical capabilities
- High motivation and readiness to contribute to the academic teaching
- Committed and reliable team player with an independent and precise way of working
- Very good knowledge of the German and English language

Our offer:

- Research in an interesting and innovative field of technology
- Opportunity to write a PhD thesis and participation in international scientific conferences
- Close supervisory relationship and intense dialogue in a dynamic and highly motivated team
- Three-year fixed term contract (40h/week) with the option for prolongation
- Annual salary € 41.601,- (gross)

We are looking forward to receiving your application including the usual documents via e-mail sent to ochsenreiter@acin.tuwien.ac.at. If you have any questions, please contact Prof. Andreas Kugi kugi@acin.tuwien.ac.at. Further information of the Complex Dynamical Systems Group can be found at <https://www.acin.tuwien.ac.at/komplexe-dynamische-systeme-cds/>

Who we are

The Automation and Control Institute is part of the Faculty of Electrical Engineering and Information Technology at TU Wien. With a team of more than 90 staff members, the institute performs basic research, solves challenging real-world research questions in numerous co-operations with industry, develops innovations and offers a research-oriented education in the field of system technology and automation.