

## Seminar on current research in chemical technology for employees and students (advanced internships and theses) – SS 23

Time/Location: Tuesday, 14:00, Bldg. 11.21, HS 006, language: English; LV no. 5434,

if online: BBB <https://itcp-bbb.itcp.kit.edu/b/mar-ad9-dgf>

### Presentations:

Date	Presenter	Title	Chair
18.04.2023	Fatjon Sylja	Production of CO <sub>2</sub> -free hydrogen via methane pyrolysis: influence of temperature and pressure in a high-temperature reactor Bachelor thesis final presentation	Ahmet Celik
	Fabio Öhl	Experimental investigation of the influence of structured surfaces on the hydrodynamics of falling liquid films Master thesis final presentation	Andrea Düll
25.04.2023	Dr. Steffen Tischer	A data type to resolve ambiguity in species names Short communication/ discussion	Prof. Dr. Olaf Deutschmann
09.05.2023	Lukas Zeh	Three-way catalysts under periodic conditions Master thesis final presentation	Daniel Hodonj
23.05.2023	Barbara Thiele	Hydrogen activation and conversion over noble metal-based catalysts Student internship "Vertiefer" final presentation	Dr. Patrick Lott
	Andreas Strubel	Process simulation of the reforming of ammonia Master thesis intermediate presentation	Prof. Dr. Olaf Deutschmann
	Jaime Valdes	Numerical Simulation of the Absorption of CO <sub>2</sub> in a Falling Film Absorber Bachelor thesis final presentation	Andrea Düll
06.06.2023	Akash Bhimrao Shir-sath	Automated reduction and optimization of large reaction mechanisms: Modeling methane pyrolysis in the gas-phase Ph. D. intermediate report	Manas Mokashi
27.06.2023	Anna Knapp	Steam Iron Process: Hydrogen storage by modified iron oxides Master thesis intermediate presentation	Carola Kuhn
	Marco Kirn	Iron as energy carrier: Experimental studies on the optimization of process conditions Master thesis intermediate presentation	Carola Kuhn
04.07.2023	<del>Paul Jakob Jägerfeld</del> <i>postponed</i>	<del>Automatic fitting of Butler-Volmer kinetic parameters</del> Ph. D. intermediate report	Felix Ehrlich
11.07.2023	<del>Michael Borchers</del> <i>postponed</i>	<del>NO<sub>x</sub> reduction by hydrogen for hydrogen-powered engines</del> Ph. D. intermediate report	Sven Schardt
	Florian Völker	Production of CO <sub>2</sub> -free hydrogen via methane pyrolysis: impact of carbonaceous materials on methane conversion and product selectivity in a high-temperature reactor Master thesis intermediate report	Ahmet Celik
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18.07.2023	Edward Kusumowidagdo	Experimental investigation of the oxidation of iron with steam for hydrogen production Student internship "Vertiefer" final presentation	Carola Kuhn
	Paul Jakob Jägerfeld	Automatic fitting of Butler-Volmer kinetic parameters Ph. D. intermediate report	Felix Ehrlich
05.09.2023	Sinan Demir	Numerical simulation of methane and biogas pyrolysis Master thesis intermediate report	Ahmet Celik
<b>Wednesday,</b> <b>13.09.2023,</b> 09:30 h, Bldg 11.21, R. 006	Andreas Strubel	Process simulation of the reforming of ammonia Master thesis final presentation	Prof. Dr. Olaf Deutschmann
	<del>Daniel Hodonj</del> <i>postponed</i>	<del>Three-way catalysts under periodic conditions</del> <del>Ph. D. intermediate report</del>	<del>Ahmet Celik</del>
	Philipp Blanck	Electrochemically enhanced low-temperature catalytic ammonia synthesis Ph. D. intermediate report	Oscar Furst
	Yannik Neudeck	Techno-Economic Study of CO <sub>2</sub> -free Hydrogen Production and Carbon Capture via Pyrolysis of Methane and Biogas Master thesis intermediate report	Ahmet Celik
26.09.2023	Anna Knapp	Steam Iron Process: Hydrogen storage by modified iron oxides Master thesis final presentation	Carola Kuhn
	Marco Kirn	Iron as energy carrier: Experimental studies on the optimization of process conditions Master thesis final presentation	Carola Kuhn

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\* Please note: Changes to the program will be announced on the ITCP homepage: <https://www.itcp.kit.edu/364.php>.