

**Tentative Schedule: Summer School "Applied thermodynamics - a powerful enabler for sustainable gas processing and energy solutions" from 19.-23.07. 2021**

	Monday, July 19 <b>Introduction and Applied Thermodynamics</b>	Tuesday, July 20 <b>Natural Gas as Environmental Friendly Energy Source</b>	Wednesday, July 21 <b>Green Hydrogen</b>	Thursday, July 22 <b>Carbon Management</b>	Friday, July 23 <b>Flexibilization of Industrial Plants</b>
08:00 - 08:30	Registration				
08:30 - 10:00	Introduction to the Summer School / Organisational Issues				
	Lecture and Tutorial: Industrial Gas Processing and Industry	Lecture and Tutorial: Process Gas Properties (Methane, Hydrogen, CO <sub>2</sub> , Natural Gas)	Lecture and Tutorial: Green Hydrogen: Sources and Role in Future Energy Supply	Lecture and Tutorial: CO <sub>2</sub> as a Building Block for Sustainable Processes	Lecture and Tutorial: Demand Side Management
	Dozent Linde	Dozent TUM (Jocher)	Dozent TUM (Hamacher)	Dozent TUM (Skerra; Haas )	Dozent Linde
10:00 - 10:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
10:30 - 12:00	Lecture and Tutorial: Applied Thermodynamics (Gases and Cryogenics)	Lecture and Tutorial: LNG: Processing, Use and Value Chain	Lecture and Tutorial: Hydrogen: Generation and Processing	Lecture and Tutorial: Low CO <sub>2</sub> Emission Chemistry with Dry Reforming and Direct DME	Lecture and Tutorial: Flexibilisation of Air Separation Units
	Dozent TUM (Polifke)	Dozent Linde	Dozent Linde	Dozent Linde	Dozent Linde
12:00 - 13:00	Lunch	Lunch	Lunch	Lunch	Lunch
13:00 - 14:30	Lecture and Tutorial: Cryogenics Plants and their Contribution to the Energy Transition	13.00-14.00: Travel to Location 14.00-17.00: Excursion Linde Gas Carl-von-Linde-Straße 25, 85716 Unterschleißheim	Lecture and Tutorial: Hydrogen as a Building Block in Industrial Processes	Lecture and Tutorial: Carbon Capture Processes	13.00-14.30: Travel to Location 14.30-17.00: Excursion Linde Engineering Dr.-Carl-von-Linde-Straße 6-14, 82049 Pullach
	Dozent TUM (Klein)		Dozent Linde with input from TUM	Dozent Linde	
14:30 - 15:00	Refreshments		Refreshments	Refreshments	
15:00 - 16:30	Presentations		Lecture and Tutorial: Hydrogen as Energy Carrier and Fuel	Excursion TUM	
16:30 - 17:00	Break		Dozent Spliethoff with input from Linde		
17:00 – 18:00	Presentations				Finger Food and Certificates
18:00 - 19:00					
19:00 - 20:30	Opening Dinner				