

TARGET Winter School

“Microwave Transistors: Materials and Devices”

Call for participation

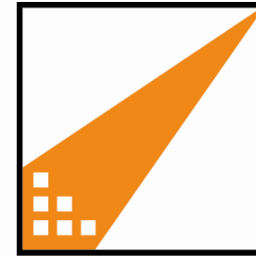
21 - 24 February, 2006

Friedrich-Schiller-Universität Jena

Helmholtzweg 5
07743 Jena, Germany

This intensive, four-day course will provide a thorough understanding of the essential background of RF transistor function and production methods. Intended for PhD students and engineers new to the field this course will focus both on theoretical and practical issues of established techniques and most up-to-date methods as well. Starting with the physics of the materials and transistors the lectures will move to more advanced development and production methods of active microwave devices. Participants will gain detailed knowledge on materials and devices in the field of microwave transistors, including power amplifiers and mixed signal devices. Delegates will be able to hear from top experts in the field and will have a chance to visit the materials characterisation and development facilities of the University of Jena and the Technical University of Ilmenau during the course. The course can be certified with three credit points. This call is addressed to partners within the TARGET Network of Excellence as well as to institutions and companies that are not directly involved in TARGET. For the latter, the registration fee per person amounts to € 500.- for Ph.D. students and € 1,000.- for senior participants which includes the Winter School and hand outs of the lectures. The fee has to be transferred before 14 February 2006 to the bank account indicated on the registration form.

Deadline for registration (by FAX, please use the registration form): 14 February 2006.



T A R G E T

TOP AMPLIFIER RESEARCH GROUPS
IN A EUROPEAN TEAM

Registration: <http://www.target-net.org/>

Winter School Contact:

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Scientific org.: Wolfgang Richter (richter@pinet.uni-jena.de)



Second TARGET Winter School

"Microwave Transistors: Materials and Devices"



Date: 21 – 24 February, 2006; Location: Friedrich-Schiller-Universität Jena, Helmholtzweg 5, 07743 Jena, Germany
 Coordination: Erasmus Langer, TU Wien; Content and local organisation: Wolfgang Richter, University Jena;

Time	Tuesday, February 21 th Materials and devices	Wednesday, February 22 th Microwave transistor technologies	Thursday, February 23 th Microwave transistor technologies	Friday, February 24 th Power devices, roadmap
9.00 – 10.30	Welcome, Opening Semiconductor materials I: Structure and electronic properties Wolfgang Richter Universität Jena	Silicon RF transistors I: CMOS Jörgen Olsson Uppsala University	Silicon RF transistors II: LDMOS Lars Vestling Uppsala University	HBTs: InGaP/GaAs and InP HBT-MMICs Joachim Würfl FBH Berlin
11.00 – 12.30	Semiconductor materials II: Alloys and heterostructures Wolfgang Richter Universität Jena	Short presentations of all participants 2-4 min per participant	Silicon RF transistors III: SiGe devices Mikael Östling KTH Kista	Power HEMTs: GaN device fabrication Joachim Würfl FBH Berlin
14.00 – 15.30	RF devices I Figures of merit and basic transistor concepts Frank Schwierz Technische Universität Ilmenau	Excursion Zentrum für Mikro- und Nanotechnologien Technische Universität Ilmenau Technology for power amplifiers Oliver Ambacher Technische Universität Ilmenau	SiC Diodes Konstantinos Zekentes FORTH	Panel discussion: RF transistor roadmap
16.00 – 17.30	RF devices II High frequency, high power transistor concepts Frank Schwierz Technische Universität Ilmenau		Mixed signal devices Rüdiger Quay IAF Freiburg	Written examination for those participants, which like to get a certificate for 3 credit points in the topic "Microwave transistors: materials and devices"
17.30 – 18.30	Guided Lab Tour Materials characterisation	Gala Dinner	Guided Lab Tour Molecular beam epitaxy	Closing