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- Chemical analysis
- Dynamic and complete power supply from renewable energy sources
- Practical environmental and energy training
- Organisation of international environment and energy conferences and workshops
- Presentation of technical papers/posters on state-of-the-art technologies and processes on environment and energy
- Scouting for international project funding resources
- Exhibitions at international fairs and conferences

Some Trade Shows

- ACHEMA (Frankfurt), N-Expo (Tokyo), EFRE-Messe (Hanover), ENT-SORGA-ENTECO (Cologne), The Big5 Show (Dubai), Pollutec East and Central Europe (Vienna), Pollutec (Lyon), Lagos International trade fair (Nigeria), Quest (Doha)

Conferences

- Organizer: IWA Specialist Conference for Water and Wastewater Treatment in Goslar, Germany
- Participant and speaker at conferences and congresses in Europe and beyond (e.g. Australia, New Zealand, Belgium, Bulgaria, France, Ireland, Italy, Germany, Norway, USA, Canada, Nigeria, Portugal, Poland, Mexico, England, Denmark, Japan, Brazil, China, UAE, Egypt, Morocco, Qatar, etc.)

Scientific Education for Students, Professors and Experts

- Foreign scientists, environmental experts and postgraduate students are intensively trained at CUTEC facility in Germany and can also be attached to projects of interest. Postgraduate students can carry out part or full academic programmes at CUTEC with scholarships.
- The CUTEC training team can also train people abroad if requested.
- Foreign professors on sabbatical leave can be hosted on specified projects.



CUTEC – The right address for sustainable environmental and power engineering

International Training Programme on Integrated Wastewater Treatment



CUTEC-INSTITUT GMBH

How to find us

By air

The nearest airport is Hanover, about 100 km from Clausthal-Zellerfeld.

From there take the Suburban Railway S5 to Hanover station and then continue via train to Goslar station. In Goslar, take the bus line 830 or 831 to Clausthal Zellerfeld.

From the airport, you can also travel by taxi (approx. EUR 120), rent a car or be driven to Clausthal using "Flughafen Transfer" services (approx. EUR 60).

By bus and rail

By rail to Goslar; from the terminal in Goslar take the bus line 830 or 831 to Clausthal-Zellerfeld

By car

See map below. For more information, look on our homepage www.cutec.de under the section "map".



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Introduction

CUTEC-Institut GmbH is situated in a small city of Clausthal-Zellerfeld, Germany located on the Harz mountain at about 600 m above sea level and approximately 100 km south of Hanover, the state capital of the state of Lower Saxony.

CUTEC operates as an interface between environmental technologies (science) and industry and conducts application-oriented environmental and energy research and development activities. This institute develops practical and hands-on technologies and processes for the sustainable and adaptable treatments of solid, liquid and gaseous wastes. CUTEC has the modern facilities required for the training of environmental personnel in all sections of the environment and energy sectors. It is a major environmental technology institute in Germany and also popularly known in Europe. CUTEC is among the few in the world where all environmental sections exist in a single building complex.

Over 200 national and international environment and energy projects as well as consulting have successfully been implemented. Such projects are normally funded by the European Commission, the industrial partners, Governments, funding organisations or communities/local authorities. CUTEC has more than 120 employees working in six departments headed by competent managers with optimal interdisciplinary operations. The successes made by CUTEC in the development and application of various environmental and energy technologies and processes have motivated it to extend its activities beyond Europe. CUTEC-



Laboratory Experiments

Institut co-operates with the private and industrial sectors, research funding organisations and universities. Integration of environmental factors in all human activities such as residential and industrial production processes is vital to CUTEC to ensure global environmental safety. Major operational and international interest areas

- Effective and sustainable treatments of solid, liquid and gaseous wastes
- Water management
- General environment and energy consultant
- Advanced Oxidation Processes for water, wastewater and sludge treatment
- Sludge conditioning and dewatering
- Emission reduction
- Energy process engineering
- Biogas production
- Thermal processes for pyrolysis, gasification and combination
- Fuels from regenerative and fossil sources
- Conversion of fermentation gas, syngas and hydrogen production
- Fuel cell system engineering
- Membrane bioreactors
- Membrane separation processes
- Adapted technologies for developing countries
- Sustainability Management
- Modelling
- Simulation Technology

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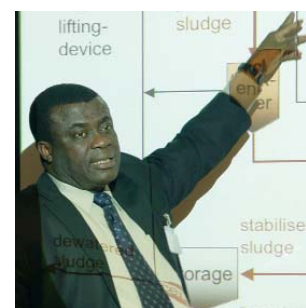
Training Programme on Integrated Wastewater Treatment

Maximum number of Participants: 10 / Period of training 2 weeks

Course content

- Presentation on CUTEC and tour of CUTEC facility
- Water – The gold of tomorrow
- Sewage treatment – History, fundamentals, and state of the art
- Sewage Sludge treatment – state of the art in Germany and EU
- Water management and sanitation strategies – general concepts and special solutions for high rainfall regions
- How to plan sewage treatment plants – requirements and examples
- Precipitation and interaction during unsaturated underground passages and groundwater
- Environmental analysis with special focus on water and wastewater monitoring
- Decentralised sanitation concepts
- Industrial waste water – characteristics, treatment requirements and technologies
- Flocculation processes – fundamentals and applications
- The FlocFormer technology – Advanced flocculation for wastewater and sludge treatment
- Experimental workshop on wastewater and sludge treatment, e.g. flocculation
- Ozone as powerful oxidant for disinfection, for waste water reuse and for drinking water treatment
- Experimental workshop on ozonation

- Membrane processes – emerging technology for water and wastewater treatment
- Experimental workshop on membrane process evaluation



Lecture by Dr. Onyeche



CUTEC Trainees

- Experimental workshop on biogas process evaluation
- Landfill leachate

Field Trips

- Visit a landfill leachate treatment plant
- Plant purification unit
- Wastewater treatment plant
- Wastewater treatment plant in combination with biogas plant
- Berlin Waßmannsdorf, one of the largest European sewage treatment plants
- Central sludge treatment plant Köhlbrandhöft
- Meta plant (harbour silt)



Pilot Plant