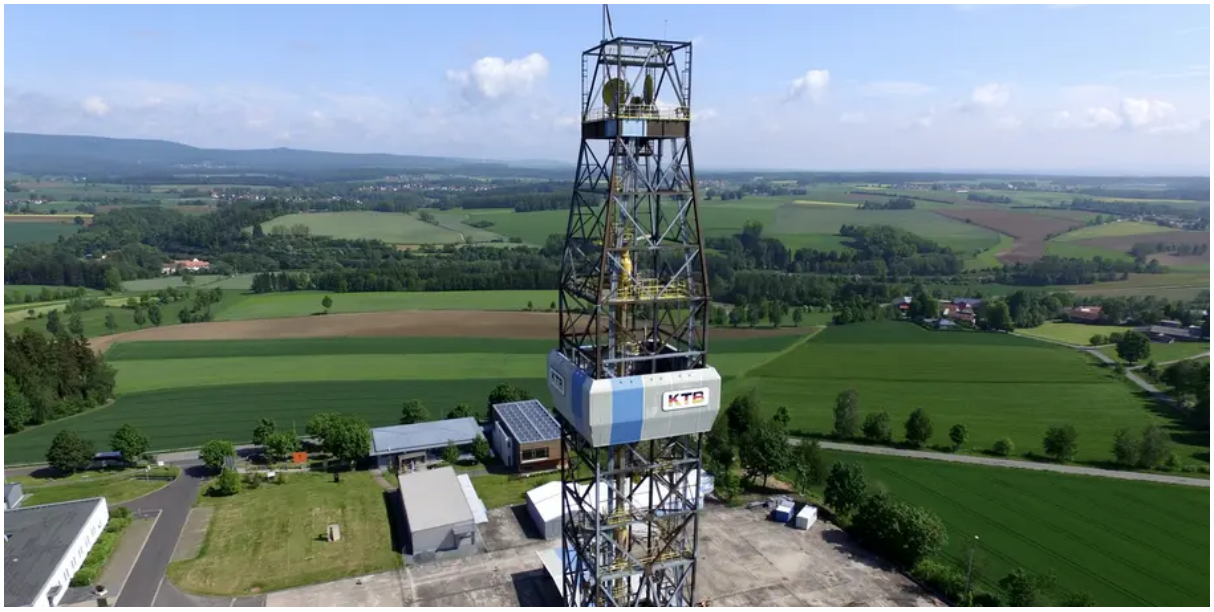
ICDP 2026 Training Course Program

KTB Windischeschenbach, Germany
07 – 12 June 2026





View in a northerly direction over the drilling rig of the main borehole of the KTB (Continental Deep Drilling Programme of the Federal Republic of Germany) (Photo: J. Dolles, GEO-Zentrum an der KTB).

ICDP 2026 Training Course Detailed Program

Sunday, 07 June (Day 1)

18:00 – 20:00 Reception of Participants and Icebreaker at the Hotel "Zum Waldnaabtal"

- Reception of participants with distribution of printed materials and a brief overview of the week's schedule.
- Informal Welcome Address | Ana Rei, ICDP OSG and Elena Robakiewicz, Uni Köln & ECR Network

Tour de Table: Getting to Know the Group

- Each participant gives a very short introduction (name, home institution, and one course topic they are most interested in or curious about), keeping their turn to about 30 seconds.
- Social event: Enjoy a relaxed buffet with local delicacies and informal networking with fellow participants and instructors.
- Icebreaker – "Drilling Bingo": As participants move around the buffet, they complete a fun "Drilling Bingo" card by finding colleagues who match different statements. The first person to complete a line wins a small symbolic prize, encouraging further introductions and conversations.



End of Day 1

Monday, 8 June (Day 2)

08:30 – 09:00

Welcome & Introduction | Thomas Wiersberg, ICDP OSG & Frank Holzförster, GeoZentrum KTB

An overview of the International Continental Scientific Drilling Program (ICDP) as a global initiative supporting scientific drilling at key sites worldwide, followed by an introduction to the objectives, structure, and focus of the ICDP 2026 Training Course.

09:00 – 11:15 *Including 15 min break*

The German Continental Deep Drilling Program (KTB): Scientific Outcomes, Lessons Learned, and Contemporary Relevance | Ulrich Harms, ICDP OSG and Carolin Böse, GFZ

The German Continental Deep Drilling Program (KTB) was a comprehensive investigation into the physical and chemical characteristics of the central European deep crust. The program focused on determining thermal and mechanical properties, identifying fluid pathways, and resolving geophysical anomalies within a tectonically complex region. Situated in Windischeschenbach, the KTB site offered a unique opportunity to investigate a protracted terrane collision orogeny with long-lasting tectono-metamorphic history. The resulting dataset provides an unprecedented well-understood crustal block of 10 km depth with two deep boreholes and numerous geophysical site-surveys with ongoing research in the deep crustal lab.

This contribution will present an overview of the core scientific objectives and achievements of the KTB project, alongside a discussion of the socio-political factors and funding strategies necessary to support such a large-scale, high-cost endeavor. The format will include presentations and interactive group exercises designed to facilitate a comprehensive understanding of the project's legacy and its relevance to contemporary deep crustal research.

Building on this perspective, Carolin Boese will provide an overview of current activities at the KTB deep crustal lab in the context of deep geothermal research, such as the GEOREAL project. GEOREAL utilized the KTB boreholes to monitor fluid injection and induced seismicity in the crystalline basement with borehole sensors. She will introduce the “KTB 2.0” concept in such a way that it mimics an ICDP project proposal structure, outlining relevant components to directly connect to the session “ICDP Project Planning & Management: Key principles for designing and executing successful scientific drilling projects” by Thomas Wiersberg.

The current focus on petrothermal reservoir development at the KTB will be illustrated in comparison to other successful international projects in crystalline rock, regarding innovative drilling technologies, reservoir enhancement through adaptive stimulation techniques and high-resolution micro-seismic monitoring.

By the end of this talk, after completing the “Design Your Drilling Project” closing activity, participants will be able to fill in the corresponding sections of the ICDP-proposal template (e.g., “Location & Setting: World class site”, “Main Scientific Question: World class science”, “Societal Benefit”, and “Funding & Political Framework”).

FURTHER READING:

1. Harms, U., Kück, J. (2016): Superdeep Tests and Experiments at 9.1 km and 4 km. - Journal of large-scale research facilities, 2, A75, https://doi.org/10.17815/jlsrf-2-132
2. Harms, U., Kück, J. (2020): KTB Depth Laboratory: A Window into the Upper Crust. - In: Gupta, H. K. (Ed.), Encyclopedia of Solid Earth Geophysics, (Encyclopedia of Earth Sciences Series), Cham: Springer International Publishing, 1-7, https://doi.org/10.1007/978-3-030-10475-7_242-1
3. Huenges, E., Engeser, B., Erzinger, J., Kessels, W., Kück, J. (1997): The permeable crust: Geohydraulic properties down to 9100 m depth. - Journal of Geophysical Research, 102, B8, 18255-18265.
4. Kessels, W., Kück, J. (1995): Hydraulic communication in crystalline rocks between the two boreholes of the Conti¬nental Deep Drilling Project in Germany. - International Journal of Rock Mechanics and Mining Sciences, 32, 1, 37-47, https://doi.org/10.1016/0148-9062(94)00017-W
5. Boese, C. M., J. Kück, G. Zimmermann, G. Dresen, S. Kamrani, U. Harms, I. Sass, and M. Bohnhoff (in press), Hydraulic analysis of the GEOREAL fluid injection experiment at the KTB pilot hole, Germany, Geothermics, doi:10.2139/ssrn.5667645.
6. Emmermann, R., and J. Lauterjung (1997), The German Continental Deep Drilling Program KTB: overview and major results, Journal of Geophysical Research: Solid Earth, 102(B8), 18,179–18,201.

11:15 – 11:45

Photography for Public Engagement in Scientific Drilling (Part 1) | Ursula Heidbach, ICDP OSG

Mobile phone needed for this workshop

Visual communication is a powerful tool for outreach in scientific drilling and geoscience. This 30-minute hands-on photography workshop will introduce participants to basic mobile phone photography principles tailored to field sites, core examination, drilling equipment, and outreach events.

Using their own smartphones, participants will practice taking clear, engaging photographs that can be used in ICDP outreach materials, social media (SM), and project reports.

The workshop begins with an overview of key photographic techniques and then moves into practical exercises during the site visit to the KTB drilling rig, including photographing drilling-related equipment, the drill rig and staged "field-style" group scenes.

11:45- 15:15 *Including 1 hour Lunch Break*

Fundamentals of Drilling Engineering | Said Kamrani, ICDP OSG

Foundational session, essential for participants from diverse scientific backgrounds who may have limited experience with the engineering aspects of drilling operations, but require this knowledge to effectively plan and carry out research projects involving subsurface sampling and measurements. This session begins with an introduction to drilling terminologies and technologies, followed by detailed explanations of drill rig equipment and components, drilling workflows, and essential hardware including drill pipes, bits, drilling mud, cementation, and casing systems. Advanced drilling engineering topics will be equally addressed, including economic considerations, health and safety protocols, risk assessment methodologies, and reporting requirements that form the administrative backbone of successful drilling operations.

At KTB, participants will have the opportunity to see the major components of a deep drilling endeavour and get hands-on experience with the heavy machinery used for deep drilling.

Coffee Break (15 minutes)

15:30-17:00

Continuous Wireline Coring | Jan-Erik Rosberg, Lund University, Sweden

Presentation on continuous wireline coring techniques, comparing and contrasting mining versus oilfield drilling approaches and examining their respective advantages and limitations. In this session, **Jan-Erik Rosberg** from Lund University, in Sweden will conduct a detailed discussion of coring equipment and techniques, supplemented by case studies from major ICDP projects including COSC-1, COSC-2, and the Eger Rift. Continuous wireline coring represents a specialized approach critical for scientific drilling where sample quality and recovery are paramount concerns, distinct from oilfield-style drilling operations that may prioritize speed and cost-efficiency over sample integrity.

17:00 – 18:00

Site Visit – KTB Drilling Rig, Drill Bits, and Outreach Photography | Said Kamrani, Jan-Erik Rosberg, Ursula Heidbach

Participants will visit the KTB drilling rig and related facilities, gaining first-hand insight into the layout, equipment, and operational environment of a deep scientific drilling project. The group will be divided into three sub-teams that rotate through three 20-minute stations:

- **Station 1 – Drilling Rig (Said Kamrani)**: Introduction to the rig setup, core handling, and how drilling operations are supervised at KTB.
- **Station 2 – Drill Bits and Coring Equipment (Jan-Erik Rosberg)**: Hands-on inspection of different drill bits and core barrels used in scientific drilling, with an emphasis on their design and function.

- **Station 3 – Practical Photography Exercise (Ursula Heidbach)**: Participants apply the photography principals learnt earlier by taking SM-oriented images of equipment, the KTB drilling rig and group images under guided supervision. These principals can then be used for the excursions on Day 2 to the the Altenparkstein outcrop and the borehole station to gather further image material.

This integrated visit links drilling engineering, coring practice, and visual outreach, helping participants connect theoretical concepts with real-world infrastructure while building material suitable for ICDP-related public communication and documentation.

By the end of the afternoon, participants will be able to apply their understanding of coring strategy and technical constraints to fill in the relevant sections of the ICDP-proposal template e.g., “Drilling Concept & Technical Feasibility”, “Health, Safety, and Risk Considerations”, and “Project Planning & Logistics”, “Adequacy of Site Characterization”.

19:00 Dinner
End of Day 2

Tuesday, 09 June (Day 3)

08:30 – 10:00

Downhole Logging Basics, Methods and Instruments | Jochem Kück, ICDP OSG

This session introduces the basics of downhole wireline logging. The concept of a logging setup is explained (logging winch and cable, logging tools, tool combinations, the logging process, and specific terms). Emphasis is placed on the typical logging conditions in comparison with core data. An overview of typical wireline logging methods and sondes is given (e.g. natural gamma, electrical conductivity, acoustic velocity, density, etc.). Alternative downhole logging methods for difficult and adverse borehole conditions are shown.

10:00–10:45

Site Visit – Downhole Logging part 1

All participants will attend the beginning of a deep wireline logging run in the KTB main borehole (30-40 min).

Coffee Break (15 minutes)

11:00 – 12:30

Foundations of Log Interpretation | Simona Pierdominici, ICDP OSG

This session introduces participants to the principles of downhole log interpretation and their application in scientific drilling projects. It begins with an overview of common well-log responses and explains how different lithologies, such as sandstone, shale, and crystalline rocks, are reflected in measurements including natural gamma radiation, resistivity, bulk density, and acoustic (sonic) velocity logs. Participants will learn how these logging responses reflect variations in mineral composition, porosity, fluid content, and rock fabric. The second part focuses on image logs and highlights their importance not only for identifying tectonic features, but also for a broader range of geological interpretations. The third part presents case studies illustrating the use of downhole logging measurements in scientific applications, including core–log–seismic integration, analyses of lacustrine environments, and investigations of the stress field.

Lunch Break (1 hour)

13:30 – 14:30

Borehole Seismology: Tools, Methods, and Insights from KTB | Carolin Böse, GFZ

Fundamentals of active and passive seismic methods will be presented together with an overview of available borehole monitoring tools. Using selected examples from previous KTB injection experiments (KTB 2000, 2004, GEOREAL 2023), we will discuss how downhole sensors are deployed, what they measure, and how these measurements complement other measurements in deep scientific drilling projects. These sensors are used to monitor subsurface responses, detect fault and fracture zones, characterize rock damage and support both scientific interpretation and real-time operational decisions. The different scales of interest regarding typical seismic analysis methods on fracture activation, stress field estimation and fluid pathway characterization in the crystalline basement will be explained.

FURTHER READING:

1. Baisch, S., and H.-P. Harjes (2003), A model for fluid-injection-induced seismicity at the KTB, Germany, Geophysical Journal International, 152(1), 160–170.
2. Bohnhoff, M., S. Baisch, and H. Harjes (2004), Fault mechanisms of induced seismicity at the superdeep German Continental Deep Drilling Program (KTB) borehole and their relation to fault structure and stress field, Journal of Geophysical Research: Solid Earth, 109(B2), 2003JB002,528, doi:10.1029/2003JB002528.
3. Bohnhoff, M., G. Dresen, W. L. Ellsworth, and H. Ito (2009), Passive Seismic Monitoring of Natural and Induced Earthquakes: Case Studies, Future Directions and Socio-Economic Relevance, in New Frontiers in Integrated Solid Earth Sciences, edited by S. Cloetingh and J. Negendank, pp. 261–285, Springer Netherlands, Dordrecht, doi:10.1007/978-90-481-2737-5_7.

4. Gräsle, W., W. Kessels, H.-J. Kümpel, and X. Li (2006), Hydraulic observations from a 1-year fluid production test in the 4000 m deep KTB pilot borehole, Geofluids, 6(1), 8–23.
5. Kästner, F., S. Pierdominici, J. Elger, A. Zappone, J. Kück, and C. Berndt (2020), Correlation of core and downhole seismic velocities in high-pressure metamorphic rocks: a case study for the COSC-1 borehole, Sweden, Solid Earth, 11(2), 607–626, doi:10.5194/se-11-607-2020.
6. Prevedel, B., F. Bulut, M. Bohnhoff, C. Raub, R. F. Kartal, F. Alver, and P. E. Malin (2015), Downhole geophysical observatories: best installation practices and a case history from Turkey, International Journal of Earth Sciences, 104(6), 1537–1547, doi:10.1007/s00531-015-1147-5.
7. Rabbel, W., T. Beilecke, T. Bohlen, D. Fischer, A. Frank, J. Hasenclever, G. Borm, J. Kück, K. Bram, G. Druivenga, et al. (2004), Superdeep vertical seismic profiling at the KTB deep drill hole (Germany): seismic close-up view of a major thrust zone down to 8.5 km depth, Journal of Geophysical Research: Solid Earth, 109(B9).
8. Shapiro, S. A., J. Kummerow, C. Dinske, G. Asch, E. Rothert, J. Erzinger, H.-J. Kümpel, and R. Kind (2006), Fluid induced seismicity guided by a continental fault: Injection experiment of 2004/2005 at the German Deep Drilling Site (KTB), Geophysical Research Letters, 33(1).
9. Stober, I., and K. Bucher (2005), The upper continental crust, an aquifer and its fluid: hydaulic and chemical data from 4 km depth in fractured crystalline basement rocks at the KTB test site, Geofluids, 5(1), 8–19.
10. Zoback, M. D., and H.-P. Harjes (1997), Injection-induced earthquakes and crustal stress at 9 km depth at the KTB deep drilling site, Germany, Journal of Geophysical Research: Solid Earth, 102(B8), 18,477–18,491.

Coffee Break (15 minutes)

14:45 – 15:15

OSG Logging Equipment | Jochem Kück & Simona Pierdominici, ICDP OSG

This short session prepares the participants for the subsequent visit to the OSG equipment. It presents the set of slimhole logging tools available through ICDP's Operational Support Group, like natural gamma, sonic and resistivity sondes, borehole imagers and logging winches. These can actually be seen and touched during the following site visit.

> *After this session, **participants will be divided into two groups and rotate between activities**. One group will remain at the KTB site to continue the logging experience, while the other group will take part in the field trip. The groups will then switch, with transportation arranged to return the first group to KTB and transfer the second group to the field site. The session will conclude at the KTB before dinner.*

15:15–18:00

Site Visit – Downhole Logging part 2

OSG logging equipment. Participants will see and can touch various logging instruments and several different logging winches used by the OSG in ICDP projects.

15:15–18:00

Field Trip – Altenparkstein Fault Zone and Borehole Monitoring Station | Ulrich Harms, ICDP OSG and Carolin Böse, GFZ

Participants will undertake a bus-based field trip starting from the KTB venue, moving first to Station 1 and then, after a short bus transfer, to Station 2 and 3.

- **Station 1 – GEOREAL Borehole Monitoring Station**

Participants will visit a borehole monitoring station and discuss options for cost-effective multi-parameter monitoring solutions, see the "low-impact" surface installation, and learn about real-time data transfer options. Within the framework of the GEOREAL hydraulic stimulation project both fluid pressure and induced seismicity were monitored, requiring a hydraulically open bottom hole section in combination with a cemented seismic sensor at depth and a well-coupled fiber optic cable along the length of the borehole.

- **Station 2 – Altenparkstein Fault Zone**

Visit of the surface expression of a major fault zone truncated by KTB in 7 km depth just, 8 km to the SW of the well near the village of Altenparkstein. Here a major escarpment striking NW-SE offers a unique aspect of Paleozoic metamorphic rocks thrusted over Tertiary sediments (only if outcrop conditions and weather allow access).

- **Station 3 – Tertiary volcano towering**

Visit a Tertiary volcano towering the Weiden Basin; this is already visible from the road to Altenparkstein. The little Geopark on top and around the flanks allows insight in intracratonic petite volcanism with basalt columns and vent agglomerates.

By the end of this field trip, participants will be able to use these observations to strengthen the geological-context and structural-setting sections of their ICDP-proposal templates, explicitly linking field-based structural understanding with planned drilling and logging objectives.

19:00 Group Dinner

End of Day 3

Wednesday, 10 June (Day 4)

08:30 – 09:30
Public Engagement in Scientific Drilling (Part 2) | Ursula Heidbach, ICDP OSG
This session continues the photography workshop begun on Day 1, deepening participants' skills in visual storytelling for scientific SM outreach. Building on the fundamentals of composition from Day 1, participants will now focus on how to plan and execute small photo-outreach sequences, for example around a specific field activity or experiment. The aim is to select and edit images so that they clearly communicate the scientific context & work methods for a SM audience.
The practical part of the session asks participants to review and refine photographs they have taken during the course (e.g., at the KTB drilling rig, the Altenparkstein outcrop, or the Borehole Monitoring Station) and to turn them into a simple visual narrative for an ICDP SM platform.

By the end of the session, participants will be able to plan simple photo-outreach activities, select suitable images for different audiences, and provide strong images to the ICDP Daily Messages and SM platforms using good visuals as a tool to convey project goals and strengthen societal scientific drilling impact.

09:30 – 10:30
Practical Activity Part 1 – Logging Data Acquisition and Preliminary Processing | Jochem Kück & Simona Pierdominici, ICDP OSG
Participants work with printed wireline logging datasets acquired from different geological settings, including sedimentary basins, volcanic successions, and crystalline basement rocks. During the activities, they learn how to recognize and interpret subsurface features through the analysis of geophysical log responses. Particular attention is given to the identification of lithological variations, fractures, bedding planes, and borehole breakouts, which are key elements for understanding rock properties, fluid flow pathways, and the structural framework of the subsurface.

Coffee Break (15 minutes)

10:45 – 12:30
Practical Activity Part 2 – Designing a Logging Program | Jochem Kück & Simona Pierdominici, ICDP OSG
A brief overview of how to establish a logging program prepares the participants for the subsequent exercise. Working in four groups, participants design a wireline logging program each for a different hypothetical ICDP drilling project. Each team develops a short project concept, defines scientific objectives to be explored by logging, establishes a suitable logging strategy, and outline the logging data management. Ultimately, the groups present their proposed logging program in a 5-minute presentation, followed by a brief discussion with instructors and peers.

Further reading:

1. Asquith, G., Krygowski, D., 2004. Basic well log analysis. 2nd ed. AAPG Methods in Exploration Series, 28, 244 pp.
2. Cannon, S., 2016. Petrophysics. A practical guide. Wiley and Sons, Ltd., Chichester, UK, 204 pp.
3. Harms, U. (Ed.)(2024): ICDP Primer - Planning, Managing, and Executing Continental Scientific Drilling Projects, Potsdam : GFZ German Research Centre for Geosciences, (Sixth Edition April 2024), 188 p. https://doi.org/10.48440/icdp.2024.001
4. Hearst, J. R., Nelson, P. H., Paillett, F. L., 2000. Well logging for physical properties. A handbook for geophysicists, geologists and engineers. 2nd ed., Wiley and Sons Ltd, Chicester, UK, 483 pp.
5. Kück, J., Groh, M., Töpfer, M., Jurczyk, A., Harms, U. (2021): New geophysical memory-logging system for highly unstable and inclined scientific exploration drilling. - Scientific drilling: reports on deep earth sampling and monitoring, 29, 39-48, https://doi.org/10.5194/sd-29-39-2021
6. Pierdominici, S., Kück, J. (2021): Borehole Geophysics. - In: Encyclopedia of Geology (Second Edition), Elsevier, 746-760, https://doi.org/10.1016/B978-0-08-102908-4.00126-0
7. Rider, M., Kennedy, M., 2011. The geological interpretation of well logs. 3rd ed. Rider-French Consulting, Ltd, 432 pp.
8. Serra, O., 1984. Fundamentals of well-log interpretation. Part 1: The acquisition of logging data. Developments in Petroleum Science 15A, Elsevier, Amsterdam.

9. Serra, O., 1986. Fundamentals of well-log interpretation. Part 2: The interpretation of logging data. Developments in Petroleum Science 15B, Elsevier, Amsterdam.
10. Schön, J. H., 2015. Physical properties of rocks. Fundamentals and principles of petrophysics. 2nd ed., Series editor John Cubitt, in Developments in Petroleum Science 65, Elsevier, Amsterdam, 512 pp.
11. Zoback, M. D. (2007). Reservoir geomechanics (449 p.). New York: Cambridge University Press.
12. Zoback, et al., (1985). Wellbore breakouts and in situ stress. JGR, 90(B7), 5523–5530. https://doi.org/10.1029/JB090iB07p05523

Lunch Break (1 hour)

13:30 – 15:30

Advanced Borehole Fluid Sampling and Monitoring| Thomas Wiersberg, ICDP OSG

This session introduces borehole fluid sampling and monitoring techniques as complementary tools to wireline logging for subsurface characterization. Methods such as downhole fluid sampling, OLGA, U-Tube systems, and gas membrane sensors will be presented in the context of log-derived indicators (e.g. permeability zones, fractures, temperature anomalies, and fluid inflow signatures). Examples from ICDP projects will demonstrate how logging data guide sampling strategy, help identify target depths, and provide the geological and hydrological framework needed to interpret fluid compositions, origins, and migration pathways.
By the end of this session, participants will be able to incorporate realistic fluid-sampling and monitoring components into the “Observables and Data Acquisition” and “Technical Feasibility” sections of their ICDP-proposal templates, explicitly linking fluid-chemistry and hydrogeological objectives with logging and drilling plans.

15:00 – 15:30

Site Visit – Downhole Logging part 3

OSG downhole fluid sampling equipment. Participants will experience the recovery of actually downhole sampled fluid from the sampler probe.

Coffee Break (15 minutes)

15:45 -17:00

The Geo-Zentrum at the KTB: A long-term outreach and education initiative | Frank Holzförster, GeoZentrum and der KTB

The German Continental Deep Drilling Program (KTB) at Windischeschenbach is not only a landmark in deep scientific drilling but also a cornerstone in the development of the International Continental Scientific Drilling Program (ICDP). This session highlights how KTB’s experience and infrastructure have contributed to the development of the GEO-Zentrum an der KTB as a major geoscience outreach and education center. Geoscience outreach is presented as a key component of sustainability and future-directed education. The session will be followed by a guided visit to the GEO-Zentrum, where participants will explore exhibits illustrating the legacy of KTB and broader geoscientific concepts, concluding with an introduction to the on-site school education facilities.
By the end of the day, participants will be able to integrate intentional photography and insights from the GEO-Zentrum session into the **Outreach and Communication** components of their ICDP proposal templates, using visuals as a strategic tool to effectively convey project goals and societal impact.

19:00 Dinner

End of Day 4

Thursday, 11 June (Day 5)

08:30 – 12:30 *Including 15 min break*

Core Handling, Sample and Data Management | Cindy Kunkel, ICDP OSG & Anja Schleicher, GFZ

Session on core, cutting and sample workflows following the steps from the drill site to the sampling party and on to publication and archiving. The presentation will focus on different expectations and experiences of the scientists and the data manager, highlighting the interplay between them.

Best practice examples will be illustrated and discussed, emphasizing the uniqueness of every project and serving as foundation for future drilling projects. A hands-on exercise will allow the participants to experience a core handling workflow during a scientific drilling campaign.

By the end of this session, participants will be able to describe realistic core-handling and sampling workflows in the "Sampling Strategy and Data Acquisition", "Data and Information Management" and "Access and Dissemination" sections of their ICDP-proposal templates.

Further reading:

1. Conze, R, et al (2017): Utilizing the International Geo Sample Number Concept in Continental Scientific Drilling During ICDP Expedition COSC-1. Data Science Journal, 16: 2, pp. 1–8, DOI: https://doi.org/10.5334/dsj-2017-002
2. Harms, U. (ed. 2024): ICDP Primer - Planning, Managing, and Executing Continental Scientific Drilling Projects, Sixth Edition April 2024. GFZ German Research Centre for Geosciences, doi: 10.48440/icdp.2024.001
3. Cornard, P. H., Schleicher, A. M., Regalla, C., Hamahashi, M., Kitamura, M., Fukuchi, R., Pickering, K. T., Kitajima, H., Wiersberg, T. (2025): Recent Advances in the Use of Drill Cuttings for Determining Subduction Zone Structure, Stratigraphy, and Stress State. - Geochemistry Geophysics Geosystems (G3), 26, 5, e2024GC012094. https://doi.org/10.1029/2024GC012094
4. mDIS online Documentation, https://data.icdp-online.org/mdis-docs/, last access, 13 May 2026

Lunch Break (1 hour)

13:30 – 15:00

ICDP Project Planning & Management: Key principles for designing and executing successful scientific drilling projects | Thomas Wiersberg, ICDP OSG

This session provides an overview of how the ICDP supports cutting-edge continental drilling projects and serves as the proposal-writing capstone of the course. It integrates the key components covered throughout the week—including drilling engineering, logging, fluid sampling, core handling, and outreach—into a coherent framework for designing an ICDP-style project.

Participants will be guided through the ICDP proposal process, from Pre-Proposal and Workshop stages to the Full Proposal, and will learn how to develop essential sections such as scientific objectives, methodology, logistics, budget, and co-funding strategy. The session also introduces the evaluation criteria of the Science Advisory Group (SAG), including scientific merit, technical feasibility, and societal impact, along with practical guidance for preparing a strong application.

By the end of the session, participants will be able to use the ICDP proposal template as an integrated document, translating insights from the course into a structured draft proposal that addresses all major evaluation criteria and can be further developed beyond the training week.

Coffee Break (15 minutes)

15:15 – 17:00
Final Project Development & Presentations | Thomas Wiersberg, ICDP OSG

15:15 – 16:00
Groups finalize and refine their ICDP-style project proposals, integrating scientific objectives, drilling and logging strategies, and outreach components into a coherent draft.

16:00 – 17:00
Group presentations (5 minutes each) followed by brief feedback from instructors and peers, highlighting the integration of course concepts into a unified project design.

19:00 Dinner
End of Day 5

Friday 12 June (Day 6)

09:00 – 11:00

ICDP Early Career Researcher (ECR) Network Session – Year One in Review |Elena Robakiewicz, University of Cologne & Olga Schmitz, Friedrich Schiller University Jena

Led by representatives of the ICDP Early Career Researcher Network, this interactive session highlights the network's first year of activities, initiatives, and opportunities for early-career scientists. The session showcases how the ECR Network promotes international collaboration, mentorship, and skill development across the global ICDP community. By the end of the session, early-career researchers will have a clearer view of how to position themselves within ongoing and future ICDP projects and how to use the ECR Network as a platform for visibility, collaboration, and proposal-centered career development.

Coffee Break (15 minutes)

11:00 – 12:00 Feedback & Wrap-Up

Course reflections, key takeaways, and future collaboration opportunities (such as ECR workshops, and chances to join ongoing or upcoming drilling projects), encouraging participants to stay engaged with the ICDP community. The value of the new ECR-network connections formed during the week is emphasized as a foundation for long-term scientific collaboration and joint proposal development.

Lunch (two hours)

End of Training Course

icdp INTERNATIONAL CONTINENTAL SCIENTIFIC DRILLING PROGRAM

ICDP 2026 Training Course Program Overview

07-12 June, Windischeschenbach, Germany

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7 June	**8 June**	**9 June**	**10 June**	**11 June**	**12 June**
	08:30 – 09:00 Welcome Address	08:30 – 10:30 Geophysical Logging Fundamentals & Logging Tools and Instrumentation	08:30 – 09:30 Public Engagement (part 2)	08:30 – 10:30 Sample and Data Management (part 1)	08:30 – 11:00 ICDP ECR Net Session
	09:00 – 10:00 KTB: Outcomes, Lessons, and Relevance (part 1)		09:30 – 10:30 Practical Activity Part 1 Data Acquisition & Processing		
	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
Arrival	10:15 – 11:15 KTB: Outcomes, Lessons, and Relevance (part 2)				
	11:15 – 11:45 Public Engagement (part 1)	10:45 – 12:30 Foundations of Log Interpretation	10:15 – 11:00 Practical Activity Part 2 Designing a Logging Program	10:45 – 12:30 Sample and Data Management (part 2)	11:00 – 12:00 Feedback & Wrap-Up
	11:45 – 12:30 Fundamentals of Drilling Engineering (part 1)				
	12:30 – 13:30 Lunch	12:30 – 13:30 Lunch	12:30 – 13:30 Lunch	12:30 – 13:30 Lunch	12:00 – 14:00 Lunch
	13:30 – 15:15 Fundamentals of Drilling Engineering (part 2)	13:30 – 14:30 Borehole Seismology: Tools, Methods, and Insights	14:00 – 15:30 Advanced Borehole Fluid Sampling and Monitoring	14:00 – 15:30 ICDP Project Planning & Management	
	Coffee Break	Coffee Break	Coffee Break	Coffee Break	
18:00 – 20:00 Reception of Participants & Distribution of course materials	15:30– 17:00 Continuous Wireline Coring	14:45 – 18:00 Logging Operations and Data Acquisition And **FIELD TRIP**	15:45 -17:00 The Geo-Zentrum at the KTB: A long-term outreach and education initiative	15:30 – 17:00 Final Project Design Group presentations	Departure
	17:00 – 18:00 Site Visit – KTB Drilling Rig, Drill Bits, and Outreach				
Informal Networking over Refreshments and Delights	19:00 – 21:00 Dinner	19:00 – 21:00 Dinner	19:00 – 21:00 Dinner	19:00 – 21:00 Dinner	

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