

Executive Director of Deep-time Digital Earth Research Centre of Excellence (Suzhou)

DDE offers the position as Executive Director for a person with fundamental, significant, well-grounded academic knowledge of geo- and/or data-sciences, the ability to identify research priorities, as part of the strategic vision for the DDE Research Centre of Excellence (Suzhou), and understanding DDE's mission and mandate as well as enthusiasm for advocating and promoting DDE's future development.

Background and context

Deep-time Digital Earth (DDE; <http://www.ddeworld.org>) is a geological sciences program dedicated to "lift" centuries-old data held by museums, research institutes, and individual scientists "from page to cyberspace." In December 2018, DDE as an International Big Science program was recognized by the International Union of Geological Sciences (IUGS), one of the world's largest scientific unions. DDE aims to enable and enhance data-driven discovery in the geosciences and create linked, interoperable big-data hubs that integrate unpublished data with existing databases in the public domain.

DDE will provide new opportunities and directions for the development of Earth Sciences. The program was formally initiated at an event in early 2019 in Beijing, China. DDE is going to invest in science infrastructures based on emerging technologies, including artificial intelligence, to serve geoscientists all around the world. The core purpose of these infrastructures will be to construct a machine-readable geoscience knowledge hierarchy for compiling and standardizing geological data of varying quality and complexity. DDE Research Centers of Excellence (DDE RCEs) will constitute a network bringing together top scientists and creating new knowledge via a range of research activities focused on data-driven discoveries. A number of DDE RCEs will be established in different parts of the world to support and implement the DDE program. The RCE (Suzhou) in China is the first to be established under the DDE program.

DDE now seeks an Executive Director of the RCE (Suzhou) who can provide outstanding leadership at the international level in the role of overseeing the DDE data-driven discovery and related research. The Executive Director should be a scientist in geo- and/or data-sciences, and has demonstrated experience in guiding the development of scientific/research institutions and an adaptable personality for living and working effectively in cultures different from his/her own. The Executive Director will represent the RCE (Suzhou) to promote DDE and expand the program's international reputation. He/she shall serve in developing ideas for future research and as chief of research teams in order to attract top scientists and postdocs who focus on data-driven

discovery of geosciences or developing related infrastructure.

The Executive Director will report directly to the Director of the DDE RCE (Suzhou) / DDE Executive Committee(DDE/EC).

Duties and Responsibilities

1. Generate ideas, formulate strategies and action plans for the institutional development of the RCE (Suzhou) that emphasize data-driven discovery in earth sciences, in particular geosciences.
2. Recruit top scientists and postdocs to design, develop and implement scientific and research components of the Medium-Term Strategic Plan (MTP), in particular Objective 3 of the Plan to develop research and training programs of the RCE(Suzhou) identifying and creating a global network of RCEs promoting the DDE mission of data-driven discovery.
3. Oversee all research activities at the RCE (Suzhou); evaluate the progress of project implementation; manage research teams; provide professional guidance for postdocs in collaboration with Suzhou Technological Centre and the DDE Secretariat.
4. Prepare quarterly and annual reports to DDE/EC, DDE Science Committee (SC) as well as to organizations and sponsors that provide financial support to the RCE(Suzhou) as required;
5. Work closely with the DDE Secretariat and DDE Members and partners responsible for events, outreach, and media to articulate and disseminate results and outcomes of the DDE program to scientists, researchers, natural resources policy and management professionals, and selected public interest groups.
6. Ensure that the RCE (Suzhou) research is produced in line with the highest standards of intellectual honesty, research ethics, and academic conventions.
7. Undertake and execute any other assignments as determined by DDE/SC and EC.

Qualifications

Essential Qualifications

1. PhD degree in geoscience or in related Earth Sciences fields with deep knowledge in geoscience; knowledge and experience with tools, techniques and approaches of data science and their applications in geoscience research.
2. Excellent communication, analytical, grant writing, organizational, and managerial skills.
3. Experience with managing research institutions and scientific research networks, preferably at the international level.
4. Extensive experience in supervision of post-doctoral research; ability to design and develop training programs for scientists and non-scientists in geoscience.
5. Demonstrable experience in designing and developing research proposals for successful fund raising and financial resources mobilization; experience in promoting

and implementing of cross-disciplinary projects for international scientific collaboration.

6. Commitment to an open, co-operative, positive and creative management style that can accommodate staff originating from different countries and cultures.

Desirable Qualifications

1. Well-established reputation and recognition in related fields through quality publications, participation in international organizations, contributions to peer-reviewed journals, funding bodies, and organizations of major international events in geo, data and/or earth sciences and other achievements.
2. Previous experience and participation in data-driven discovery initiatives in geosciences or in related earth science fields.
3. Familiarity and experience with machine learning applications, big data analytics, and other data science tools and technologies in earth sciences.
4. Ability to create a strategic vision and develop international collaborations and provide leadership and direction to multi-cultural teams of researchers and other staff of RCE (Suzhou).

Location

The DDE's Research Centre of Excellence (Suzhou) is located in the Yangcheng Lake Science and Technology Park, Kunshan county (China), near Shanghai with convenient access.

Employment Status

Full Time

Selection and Recruitment Process

Interested applicants are requested to send a cover letter and detailed CV to the following website: <https://www.ddeworld.org/career>. All applications received will be acknowledged.

Evaluation of candidates will be based on the qualifications above. Only candidates shortlisted by DDE/SC will be further contacted for attending the interview meeting. Deadline of submission: 15th July, 2021.

Salary and Benefits

Salary is commensurate with experience and skills. DDE offers a generous, comprehensive benefits package.

Postdoctoral Fellowships

Postdoctoral Fellowships (integrated areas of Geosciences and Data Sciences, with an emphasis on the use of AI, Machine Learning and other data science tools to geosciences data)

Location: Kunshan city, Jiangsu province, China

Category: research (postdoctoral fellow)

Salary: \$53,000USD per year (pre-tax)

Post type: full time

Application Deadline: Open until filled

Eligibility Requirements

Prospective candidates are welcome to apply with a Ph.D in geosciences and other related fields of Earth sciences. Candidates who have familiarity and experience in the use of machine learning, Artificial Intelligence, big-data analytics and other Data Sciences knowledge and tools and technologies to geosciences as part of their doctoral thesis from an accredited institution of higher learning will be given preference. Applications are invited from those who obtained within the period of last 6 years.

The ideal candidate would have at least some prior experience in areas like data process and analysis, data grabbing tool, big-data analysis and application, information visualization, knowledge graphics, data storage system with interest in developing specialized products and skills. Expertise in fused area of geology and data sciences is highly desirable. The candidate must be fluent in either Chinese or English. Non-Chinese citizens should be eligible for applying for a visiting research visa to China.

DDE implements a policy of s EDI (equality, diversity and inclusivity) in all its talent recruitment, planning and operations.

Materials to be submitted (DDE World website)

Each candidate should submit the following (in Chinese or English):

1. A statement of interest outlining why you are applying and what your plans are after your post-doctoral research at the RCE(Suzhou).
2. A curriculum vitae.

3. Names, institutional background, expertise and contact emails of three referees.

Selection and Recruitment Process

Interested applicants are requested to send a cover letter/statement and detailed CV to the following website: <https://www.ddeworld.org/career>. All applications received will be acknowledged.

Evaluation of candidates will be based on the qualifications above. Only candidates shortlisted by DDE/SC will be further contacted for attending the interview meeting.

Contact Information

The post-doctoral fellow will be provided an annual pre-tax sum of US\$ 53,000 covering salary, accommodation, insurance and living expenses. Those who wish to opt for a different health care arrangement would have to cover that expense on their own. The RCE(Suzhou) will provide office space with computer; internet access and other facilities for research.

Further information, please contact: secretariat@ddeworld.org