China Netherlands Joint Scientific Thematic Research Programme (JSTP)

Call for proposals 2010









Contents

1 Introduction			3
2	Aim		
	2.1	General	4
	2.2	Thematic focus 2010 for joint research projects: Hybrid conversion of biomass	4
3	Guidelines for applicants		
	3.1	Who can apply	6
	3.2	What can be applied for	6
	3.3	When can applications be submitted	7
	3.4	Drawing up an application	8
	3.5	Specific conditions	9
	3.6	Submitting an application	10
4	Assessment procedure		11
	4.1	Procedure	11
	4.2	Criteria	11
	4.3	Composition of the Assessment Committee	12
5	Other information		13
	5.1	Contact	13
	5.2	Timetable	13

1 Introduction

The Netherlands and China are long-term partners in international research cooperation. The bilateral scientific cooperation between China and the Netherlands is facilitated via a number of funding instruments. The Joint Scientific Thematic Research Programme (JSTP) offers funding opportunities for bilateral research cooperation between Dutch and Chinese research groups. JSTP is one of several instruments in the bilateral cooperation between China and the Netherlands.

JSTP is jointly facilitated by seven stakeholders, three in the Netherlands and four in China. Through this cooperation, broad access to the scientific research community in both the Netherlands and China can be realized.

A call for proposals will be published annually, calling for both research proposals in thematic areas, and joint seminars in all fields of science. The call for joint research proposals will feature a different thematic priority every year. The thematic priorities will be selected by the JSTP Programme Committee, and will be sufficiently comprehensive to cover proposals that may focus on a variety of research questions pertaining to specific scientific disciplines, while fitting into the overall thematic area as defined in the annual call (e.g. comprising research questions from the natural sciences as well as the social sciences).

The programme will start as a pilot, running for three years.

Stakeholders

The stakeholders are, in The Netherlands:

- The Netherlands Ministry of Education, Culture and Science (OCW);
- The Royal Netherlands Academy of Arts and Sciences (KNAW);
- The Netherlands Organisation for Scientific Research (NWO);

and in China:

- The Ministry of Science and Technology of the People's Republic of China (MoST);
- The Ministry of Education of the People's Republic of China (MoE);
- The Chinese Academy of Sciences (CAS);
- The Chinese Academy of Social Sciences (CASS) .

This Call for Proposals sets out information about the possibilities for submitting applications, the conditions that applications must meet and the procedure for assessing the applications. It also includes a brief description of the programme.

This Call for Proposals pertains solely to the second round in the grant process of the JSTP-programme 2010.

2 Aim

2.1 General

The China Netherlands Joint Scientific Thematic Research Programme (JSTP) aims at stimulating sustainable research collaboration by funding joint research projects and thematic dialogue seminars. JSTP aims at a high level of visibility of the projects and their output.

Thematic dialogue seminars

The aim of the thematic dialogues is twofold: the seminars serve as foresighting exercises aimed at identification of research topics for future joint research that can be embedded in the research lines of the participating research teams. Secondly, the seminars are important networking opportunities for Chinese and Dutch researchers.

The seminars for thematic dialogue can target all scientific disciplines and are therefore not bound to the annual theme for the call for proposals of the joint research projects.

Participation of multiple research groups in both the Netherlands and in China is envisaged.

Joint research projects

JSTP aims at fostering research collaborations of Sino-Dutch research teams that share high ambitions to work together in sustainable joint research projects by providing multi-annual research funding, and by calling for proposals demonstrating complementary expertise between Chinese and Dutch research teams in areas, in which both China and the Netherlands excel. Thematic calls for proposals will be published annually, featuring different thematic priorities each year. The 2010 call for proposals addresses the research topic 'Hybrid conversion of biomass'.

Workshop on Hybrid conversion of biomass in the Netherlands

On 29 and 30 March 2010 a workshop on *Hybrid conversion of biomass* will be organised in the Netherlands. This workshop will bring together researchers from China and the Netherlands to brainstorm on ideas for drafting joint Sino-Dutch research proposals. The workshop aims at supporting the development of joint research applications to the 2010 JSTP call for joint research projects on hybrid conversion of biomass.

Budget

A budget of € 1,6M is available for the 2010 JSTP call on the Dutch side. This budget covers funding for five joint projects and two seminars. This contribution will be matched by the Chinese counterparts.

2.2 Thematic focus 2010 for joint research projects: Hybrid conversion of biomass

The research topic *Hybrid conversion of biomass* is demand-driven and aims at integrating the fields of biology, biochemistry, thermochemistry, catalysis and process technology in order to develop new processes that fully and efficiently utilize biomass and convert it to energy, and chemical products. The JSTP-programme 2010 has the ambition to integrate these research areas. Collaboration between these research fields enables the generation of new ideas and exciting opportunities.

Moreover, the JSTP-programme 2010 also offers possibilities for the study of the impact on society, economy and environment as a result of the use of biomass and biomass conversion.

Joint research projects could cover the following levels of integration:

- Process level: Building up biomass conversion processes from attractive combinations of bio-catalytic, heterogeneous / homogeneous catalytic, thermo-chemical reaction steps and process technology. Examples: the biocatalytic conversion of (side) products of a thermo-chemical process (or vice versa), the application of heterogeneous catalysis in thermo-chemical processes, an advanced integration of the biomass value chain, and the enhancement of the value of nitrogen, phosphor and sulphur rich waste streams.
- 2. Reactor level: Combinations of bio- / heterogeneous / homogeneous catalysis in a single reactor system, to enhance the combination of high activity and high selectivity in biomass conversion, to fully utilise bioenergy and biomass, to substantially intensify the process routes, to integrate reaction and separation in a single reactor. Design of reactors that can facilitate these combi catalysts is an integral part of this approach.
- 3. Molecular level: The combination of bio-catalysis and heterogeneous / homogeneous catalysis on a molecular level. Examples are: the immobilisation of enzymes on heterogeneous carriers and / or catalysts, and the development of heterogeneous / homogeneous catalysis based on the fundamental knowledge of the reaction mechanism and / or bio-catalysis.
- 4. <u>Support level</u>: The development and / or application of new analytical and characterisation methods for research on biomass and biomass derived products.
- Social and economic level: This covers societal and economical research related to new biomass process chains, to study and address the impact of these new technologies and products on the society, economy and environment.

3 Guidelines for applicants

3.1 Who can apply

Eligible research teams are composed of Dutch and Chinese researchers, with active involvement in the project of a senior Principal Investigator (PI) on both the Chinese and the Dutch side.

For Dutch scientists the NWO/KNAW eligibility criteria are applied, i.e. the Dutch applicants should meet the following criteria:

Professors, associate professors and assistant professors as well as other researchers holding a similar position can apply if they:

- employed at a Dutch University or a research institute acknowledged by NWO and
- have an employment contract for at least the duration of the application procedure and the duration of the research the grant is applied for 1 and
- have at least a master's degree in science or engineering or an equivalent qualification.

For Chinese scientists, the different Chinese counterparts will enable participation of the scientists resorting under their organisation. There are three contact points for JSTP in China (1) MoST/MoE (2) CAS and (3) CASS. The Chinese PI needs to meet the eligibility criteria of one of these contact points, including:

(1) MoST/MoE:

- The Chinese research group should be a key player in the field of biomass conversion research;
- The Chinese PI should demonstrate that the research group in China is or has been involved in research collaboration with the Netherlands
- The Chinese PI is affiliated to a non-CAS/CASS institution under MoST
- (2) CAS: The Chinese PI should be affiliated to a CAS research institute.
- (3) CASS: The Chinese PI should be affiliated to a CASS research institute.

These eligibility criteria are the same for both the thematic dialogue seminars and the joint research projects.

3.2 What can be applied for

Modalities

The JSTP Programme has two funding modalities: sustainable research collaboration (via joint research projects) and foresighting activities (via thematic dialogue seminar series).

¹ For co-applicants an exception can be made if the applicants can prove that adequate supervision of all researchers for whom funding is applied can be guaranteed for the full duration of the grant.

3.2.1 Joint research projects

Joint research projects with a duration of 3 to 4 years. Funding can be applied for: *Dutch PI:*

- employment costs of 1 post-doc researcher (for max. 3 yrs.) or 1 PhD researcher (for 4 yrs.)
- travel expenses and accommodation costs for researchers involved in the project (including travel and accommodation costs for project meetings)
- contribution to material and equipment costs (including acquisition of data sets)

The maximum budget that can be applied for on the Dutch side for an individual project will comprise up to € 280,000.

MoST/MoE PI:

- travel expenses and accommodation costs for researchers involved in the project (including travel and accommodation costs for project meetings)
- contribution to material costs (including acquisition of data sets)
- contribution to fieldwork costs

The maximum budget that can be applied for at MoST/MoE for an individual project will comprise up to 150.000 Yuan RMB.

CAS PI:

- travel expenses and accommodation costs for researchers involved in the project (including travel and accommodation costs for project meetings)
- contribution to lab costs
- contribution to material costs (including acquisition of data sets)

CASS PI:

- travel expenses and accommodation costs for researchers involved in the project (including travel and accommodation costs for project meetings)
- contribution to research costs

3.2.2 Thematic Dialogue

 Joint seminars, with 10 to 15 participating scientists from each side.
 Participation of multiple research groups with relevant expertise from both the Netherlands and from China is required.

The maximum scope of an individual seminar will comprise up to \leqslant 30,000. Additional contributions for on shore costs for seminars organised in China may be provided.

3.3 When can applications be submitted

3.3.1 Expressions of interest / workshop Hybrid conversion of biomass

The deadline for submitting 'expressions of interest' is **10 March 2010, 11:00 CET**. Applications received after the deadline will not be considered. The 'expression of interest' is compulsory for researchers that would like to attend the Hybrid conversion of biomass workshop in the Netherlands on 29 and 30 March 2010. Researchers who submitted an 'expression of interest' can be invited to the workshop. Travel expenses and accommodation costs for the workshop will be reimbursed. Researchers that do not submit an 'expression of interest' are still eligible for submitting a joint research proposal.

3.3.2 Joint research proposals

The deadline for submitting JSTP applications for joint research proposals is **27 April 2010, 11:00 CET**. Applications received after the deadline are not eligible for further assessment. After the deadline, improvements of or additions to applications are not permitted.

3.3.3 Thematic Dialogue proposals

The deadline for submitting JSTP applications for thematic dialogue proposals is **27 April 2010, 11:00 CET**. Applications received after the deadline are not eligible for further assessment. After the deadline, improvements of or additions to applications are not permitted.

3.4 Drawing up an application

An application consists of two parts: a completed Iris fact sheet and a core proposal in pdf format. In addition, information on the Chinese principal investigator in the Chinese language might need to be submitted to the Chinese funding agencies (please check with your Chinese contact point). The basic information listed in § 3.4.1 should be entered in the Iris fact sheet. The descriptions in § 3.4.2 form the core proposal. Information on how to structure the core proposal is provided in the description below. A Word-template will be downloadable.

Please note that all applications are to be written in **English**, unless indicated otherwise.

3.4.1 Iris fact sheet

Please note that you will be asked to select an organisation if you want to register in Iris. Because the Chinese organisations are not in the Iris system, applicants from China should select the Organisation NWO-JSTP, Location 'S-GRAVENHAGE.

The basic information listed below should be entered in the Iris fact sheet.

- Title of the proposal
- A short and specific title of the proposal.
- Concise summary
- Give a short summary of the proposal, max. 300 words.
- Applicants
 - Enter the personal information for one of the two principal investigators. There is no need to give suggestions for reviewers.
- The Chinese contact point
 Enter the contact point in China (1) MoST/MoE, (2) CAS or (3) CASS. Contact point in China depends on the eligibility criteria for the Chinese PI.

3.4.2 Core proposal

The descriptions stated below make up the core proposal. An application form will be available at the website [www.nwo.nl/jstp].

Composition of the research team

List the names of the researchers involved in the project, both in China and the Netherlands.

Institutional environment

Please indicate the host institution in the Netherlands, and in China.

List of key publications

Please list 5 key publications by the applicants related to the proposed research. The publications should give evidence of the qualifications of the applicants in this field.

For expressions of interest: Abstract of research proposal

For joint research projects: Description of proposed research

- Relevance to the theme of the call (max. 500 words)
 - Fit of the proposal into the thematic focus
- Research Programme (max. 3000 words)
 - Overall aim, key objectives, scientific background
 - Originality and/or innovative elements of the topic
 - Research plan including practical timetable over the grant period
 - Experimental techniques and/or methodology
 - Originality and/or innovative elements of the approach
 Description of the research programme should take into account the criteria specified under 'scientific quality of the research proposal' in § 4.2.
- Sino-Dutch cooperation (max. 500 words)
 - Added value of Sino-Dutch cooperation to the research project, including the complementary of the Dutch and Chinese research teams;
 - The degree of inter-institutional cooperation between the project partners, and the prospects for long term scientific collaboration beyond the duration of the research project
- Expected results (milestones / deliverables / timetable)

For thematic dialogues: Thematic Dialogue proposal

- Description of the Thematic Dialogue (max. 2000 words)
 - Foresighting aim, key objectives, scientific background
 - Originality and/or innovative elements of the topic for dialogue
- Mutual benefit to China and the Netherlands (max. 500 words)

Budget

Provide a clear budget for the costs of the proposed activities. Please consider § 3.2 when preparing your budget.

Curriculum vitae of the Dutch and Chinese PI

3.4.3 Additional information on Chinese PI

Additionally, the proposal requires information on the Chinese principal investigator, in the Chinese language. Please contact your Chinese contact point at (1) MosT/MoE, (2) CAS or (3) CASS for more information. The information on the Chinese principal investigator is to be submitted in pdf-format, according to the format provided for a PI resorting under (1) MoST, (2) CAS or (3) CASS.

3.5 Specific conditions

For Dutch researchers, this 'Call for Proposals' is subject to NWO's general grant conditions.

For Chinese researchers that apply for MoST funds, this 'Call for Proposals' is subject to the general grant conditions for 'International Science and Technology Cooperation Program'.

For Chinese researchers that apply for CASS funds, this 'Call for Proposals' is subject to CASS's general grant conditions for international exchange cooperation.

3.6 Submitting an application

Applications must be submitted in an electronic form using the Iris-system, NWO's system for electronic applications. To do this, first obtain an access code via NWO's Iris-website [www.iris.nwo.nl]. Other information about the Iris system can also be found on that website. For questions of a technical nature, contact the Iris-helpdesk (iris@nwo.nl).

On the application form, applicants need to select one of the three Chinese contact points (1) MosT/MoE, (2) CAS or (3) CASS, according to the eligibility criteria for the Chinese PI. The electronic application consists of two parts: (1) Iris fact sheet, (2) the core proposal. The fact sheet should be completed in the Iris system and contains personal information of the applicants.

4 Assessment procedure

4.1 Procedure

Joint research projects

Selection of the proposals is performed according to a joint Sino-Dutch assessment and selection procedure.

- 1. After the deadline of the call, the technical eligibility of the proposals is checked. Eligibility criteria are checked in the Netherlands and in China.
- 2. The quality of the proposals will be assessed by (international) referees, according to the criteria specified in § 4.2. Each proposal is sent to preferably 2-4 scientific experts, who will review the proposal.
- 3. The anonymised written reviews are sent to the applicants. The applicants are given the opportunity to write a single reply to the referees comments. This reply should not exceed three pages.
- 4. The assessment committee is appointed by the JSTP Programme Committee, and comprises independent scientific experts from China and the Netherlands.
 - The assessment committee convenes once to moderate, rank and recommend proposals for funding on the basis of the criteria specified in § 4.2. The ranking of the assessment committee is sent as an advice to the JSTP Programme Committee.
- 5. The JSTP Programme Committee decides on the projects to be funded.

Thematic dialogue

- 1. After the deadline of the call, the technical admissibility of the proposals is checked. Eligibility criteria are checked in the Netherlands and in China.
- 2. The quality of the proposals will be assessed in the Netherlands and in China. In the Netherlands, the KNAW-NWO China Committee assesses the quality of the proposals according to the criteria specified in § 4.2, and ranks the proposals. In China, the proposals will be assessed according to the relevant guidelines of the contact points (1) MoST/MoE, (2) CAS, or (3) CASS (CASS review panel). The outcomes of these assessment procedures on both sides and initial ranking will be sent as an advise to the JSTP Programme Committee.
- 3. The JSTP Programme Committee decides on the seminars to be funded.

4.2 Criteria

In assessing and ranking the proposals, the assessment committee will consider the following criteria:

Joint research projects

- Relevance to the theme of the call
 - Fit of the proposal into the thematic focus
- Scientific quality of the research proposal
 - challenging content;
 - originality of the topic;
 - innovative elements;
 - potential to make an important contribution to the advancement of science or technology;
 - suitability of proposed method.
- Quality of the research groups

- Sino-Dutch cooperation
 - Added value of Sino-Dutch cooperation to the research project, including the complementary of the Dutch and Chinese research teams;
 - The degree of inter-institutional cooperation between the project partners, and the prospects for long term scientific collaboration beyond the duration of the research project

Thematic dialogue

- Aimed at foresighting and identification of topics for future joint research
- Originality of the topic for dialogue
- Quality of the applicants
- Mutual scientific interest and mutual benefit to China and The Netherlands

4.3 Composition of the Assessment Committee

The Assessment Committee is composed of scientific experts from China and the Netherlands, and will be established as soon as the call for proposals has been published. The Assessment Committee reports to the JSTP Programme Committee (comprised of representatives of the stakeholders of the JSTP Programme).

5 Other information

5.1 Contact

The Netherlands

NWO

- Ms. dr.ir. E.E. (Edda) Neuteboom
- +31 70 377 0768
- e.neuteboom@nwo.nl
- Ms. ir. S.J. (Saskia) Matheussen
- +31 70 344 0549
- <u>s.matheussen@nwo.nl</u>

China

MoE/MoST

- +86 10 5888 1352
- hzs_ozc@most.cn

CAS

- Mr. FANG Qiang
- +86 10 68597273
- qfang@cashq.ac.cn

CASS

- Ms. Zhang Lihua
- +86 10 8519 5149
- zhanglh@cass.org.cn

5.2 Timetable

18 January 2010	Publishing of Call for Proposals 2010
10 March 2010, 11:00 CET	Deadline Expressions of interest Joint Research
	Projects, compulsory for researchers that would
	like to attend the workshop 'Hybrid conversion of
	biomass'
29 and 30 March 2010	Workshop on 'Hybrid conversion of biomass' in the
	Netherlands
27 April 2010, 11:00 CET	Deadline for submitting JSTP proposals for joint
	research projects and thematic dialogue seminars
27 April – 7 May 2010	Eligibility check
May – June 2010	Consult with referees
July 2010	Possibility for rebuttal by applicants
September 2010	Assessment by Assessment Committee
November-December 2010	Decision on proposals by Programme Committee
January 2011	Start joint research projects