



Chemical Sciences

Call for proposals

TOP Grants, ECHO Project Grants and ECHO-STIP Grants Subsidy Round 2011-2012

2011

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Netherlands Organisation for Scientific Research

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1 Introduction

1.1 Background

This brochure contains information about the submission of research proposals for non-subject specific, curiosity-driven molecular research at the NWO Division for Chemical Sciences (CW). CW has two types of grant for this purpose: TOP grants and ECHO project grants.

Three focus areas within Chemical Sciences

CW promotes research in the following three focal areas:

Chemistry in relation to Biological/Medical sciences

Understanding the natural world, the development of new medicines, molecular studies of the human body and cellular processes in living organisms in general, and more recently the use and manipulation of biological processes and biomimicry are established fields within chemical research. Biological chemistry, large areas of organic chemistry and certain aspects of analytical and macromolecular chemistry find their challenges in this focus area. Furthermore activities on the cutting edge between CW and ALW (Division for Earth and Life Sciences) or ZonMw (Netherlands Organisation for Health Research and Development) also fall into this focus area. The molecule in a biological or medical context takes centre stage in this focus area.

Chemistry in relation to Physics/Materials

With the emergence of nanotechnology and the molecular understanding of mesoscopic and macroscopic materials, the boundaries between certain aspects of physics and chemistry have become less distinct. Chemists and physicists in this focus area speak the same language and are interested in the same problems. New theoretical, spectroscopic and surface techniques are indispensable for progress in this area. Physical chemistry, spectroscopy and theory, chemistry of solids and materials science, aspects of organic chemistry and polymer chemistry as well as liquids and interfaces fall under the physical approach to chemistry; the activities are often at the cross section of CW and FOM (Foundation for Fundamental Research of Matter)

Chemistry in relation to Technology/Sustainability

Using raw materials and energy as efficiently as possible, the development of new technologies for producing chemical products, the analysis of these in the most modern manner using new insights from biology and physics, and providing guarantees for a sustainable society, characterise the chemistry in this focus area. Biotechnology and process-on-a-chip are just two examples of considerable importance, while catalysis aims to find the highest atomic efficiency in a chemical process. Process technology, catalysis and aspects of organic, polymer and analytical chemistry fall within this focus area, which together with ACTS (Advanced Chemical Technology for Sustainability) and Technology Foundation STW has become an important mainstay for Dutch science and technology.

1.2 Available budget

For the 2011-2012 round, CW's budget for non-subject specific, curiosity-driven molecular research is approximately M€ 10.

1.3 Validity call for proposals

This call for proposals is valid until the closing date 28-09-2011.

2 Aim

ECHO project grants

ECHO project grants are awards of € 260,000 intended for Excellent Chemical Research. Applications can be submitted by researchers at Dutch universities or research institutes acknowledged by NWO, who satisfy the conditions (see section 3.1). These grants offer the opportunity to carry out high-quality, curiosity-driven research in molecular chemistry, chemistry or chemical technology. This allows creative and daring ideas to be pursued, the seeds of future research themes to be sown and/or scientific innovations to be realised. The funding can be used for personnel, consumables and equipment.

ECHO-STIP grants

ECHO-STIP grants (ECHO-Sectorplan Tweede geldstroom Intree Project-subsidies) are ECHO-project grants of € 260,000 euro, only intended for researchers who have recently been appointed at a "Sectorplan" position in an established chemical center of excellence ("chemisch zwaartepunt").

Via the "Sectorplan Natuur- en Scheikunde" (SNS) extra budget is available for research and education in Chemistry and Physics. Part of this extra research budget is directly awarded to the universities to finance new positions in a number of centers of excellence established by the "Commissie Breimer". The remaining budget is allocated to academic research in the established centers of excellence, distributed in competition through the NWO divisions Chemical Sciences (CW) and Physics (FOM).

Researchers who have recently been appointed to a "Sectorplan" position in an established chemical center of excellence are preferentially treated by CW. In the TOP/ECHO subsidy rounds 2011-2012 and 2012-2013 only those researchers can apply for an ECHO-STIP grant. The ECHO-STIP applications are assessed in the regular TOP/ECHO rounds. An ECHO-STIP grant is awarded only once on condition that the application is assessed as grantworthy and is ranked in the upper 50% of the ECHO-applications submitted.

TOP grants

TOP grants are awards of € 780,000, intended for established, top research groups in (bio)chemistry and chemical technology with a proven outstanding track record, affiliated with Dutch universities or research institutes acknowledged by NWO. An excellent track record and excellent scientific results obtained by the group in the past form important criteria in the assessment of the TOP proposals. TOP grants give these top-research groups the opportunity and freedom to strengthen and/or extend excellent, challenging and innovative lines of research. The funding can be used during the award period (maximum 6 years) for personnel, consumables and equipment.

At present there are 57 current TOP grants from previous funding rounds. With this approach CW wants to provide continuity for excellent and innovative research.

3 Guidelines for applicants

3.1 Who can apply

All criteria below apply to the main applicants as well as all co-applicants.

- Professors, associate professors and assistant professors as well as other researchers holding a similar position can apply if they:
 - are employed at a Dutch University or a research institute acknowledged by NWO and
 - have at least a master's degree in science or engineering or an equivalent qualification 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. 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.
- To be eligible for a TOP grant, the applicant must belong to one of the top research groups in the Netherlands for biochemistry/chemistry/chemical technology. There can only be one TOP grant/proposal per research group; a research group is defined as researchers who usually publish together. An individual intending to submit an application, should inform the other members of the research group.
- Only researchers (professor, associate/assistant professor, tenure track) who have recently been appointed at a "Sectorplan" position in a chemical center of excellence (chemisch zwaartepunt) can apply for an ECHO-STIP grant.
- Researchers who satisfy the submission criteria for the Innovational Research Incentive Scheme Veni or Vidi as described in the Innovational Research Incentive Scheme brochure (see <http://www.nwo.nl/vernieuwingsimpuls>) may not submit a proposal for a regular TOP or ECHO project grant.
- A researcher who submitted a full proposal to one of the NWO divisions in the Vici round 2011 cannot apply for a regular TOP grant or ECHO project grant with CW.
- Between 1 July 2011 and 1 January 2012 a researcher may submit only one application to CW for a TOP grant, an ECHO project grant or an ECHO-STIP grant.
- Research groups which have already been awarded a TOP grant in one of the previous three years (2009-2011) by one of the divisions of NWO cannot submit a TOP grant application to CW.
- Current NWO grants should be sufficiently committed, in other words two-thirds of the total number of personnel provided for in NWO grants awarded before 1 August 2011, should have been appointed before a regular TOP grant or ECHO project grant application can be submitted to CW. The reference date by which personnel vacancies should have been filled is 1 October 2011.

3.2 What can be applied for

- The maximum budget for a TOP grant is € 780,000 and for an ECHO project grant € 260,000.
- The grant can be used for temporary personnel, consumables and equipment related to the research proposal.
- The grants are paid as a lump sum once per year over the duration of the award. Personnel costs are subsidised in accordance with the most recent

'Agreement on Employers' responsibilities NWO - VSNU'. An estimation of the maximum amounts (including a bench fee for among others travel and promotion costs): PhD student (4 yr) – k€ 208, post-doc 1 yr – k€ 68, post-doc 2 yr – k€ 137, post-doc 3 yr – k€ 205. More information and the exact maximum amounts can be found in the Frequently Asked Questions on the website www.nwo.nl/cw/top .

3.3 When can applications be submitted

The closing date for the submission of proposals is 28-09-2011, 23:59 hours.

Proposals should be received no later than this deadline. After this deadline, no alterations or additions can be made to the proposal.

3.4 Drawing up an application

Your grant application has two parts: a fact sheet and the application form.

- You complete the fact sheet directly in NWO's electronic application system Iris.
- Use the correct application form for the drafting of your proposal. Application forms can be downloaded from the CW website: www.nwo.nl/cw/top and www.nwo.nl/cw/echo . As soon as you have completed the form you can add it to the Iris fact sheet as a PDF file.
- Proposals must be submitted via Iris, the electronic submission system of NWO: www.iris.nwo.nl
- Applications should be completed in English.
- The layout of the proposal should facilitate its readability. Use a font size of at least 10 points.

Guidelines for the application form

1. *The personal details of all applicants*

- a. Give surname, initials, first name, title(s), date of birth, date Ph.D. awarded, gender, position and type of appointment (permanent/temporary) as well as the date the contract expires and the address details. Correspondence will be addressed to the main applicant.
- b. Complete the table only when applying for an ECHO-STIP grant. Indicate whether the PI has recently been appointed at a 'Sectorplan' position in a chemical center of excellence (chemisch zwaartepunt), as well as the starting date of the contract and the name of the chemical center of excellence of the PI's appointment.

2. *Title of the proposal*

3. *Classification of the proposal*

- a. Choose the CW focus area in which the proposal will be assessed: Chemistry in relation to biological/medical sciences, Chemistry in relation to physics/materials or Chemistry in relation to technology/sustainability. Also indicate the CW study group(s) into which the research falls.
- b. Indicate why your proposal fits CW, the CW focus area chosen and describe the 'innovative chemistry in/ innovative (bio)chemical or chemical technological component of' your proposal. In other words, clarify why your proposal should be considered within CW. Use maximal ¼ page.

4. *Keywords*

Provide a maximum of six relevant keywords. Choose the keywords carefully. They are used to find appropriate referees.

5. *Summary*

TOP proposals maximum 1 page; ECHO proposals maximum ½ page.

Describe the purpose of the research and the approach chosen, and state why this research must be carried out in this research group. State which collaborations are essential for the project proposed.

6. *Summary of the requested funding*

(TOP: maximum € 780,000 or ECHO: maximum € 260,000)

Provide separate details for personnel costs, consumables credit and equipment. A justification of the budget applied for should be included under question 10.

7. *Group members involved in proposed research*

State the staff members who are involved in the proposed research (surname, first name, initials, title) and the nature of the involvement (for example day-to-day supervision, Ph.D. supervisor).

8. *Current grants*

State which grants you and your co-applicant(s) are receiving from

- a. NWO and the NWO Divisions, including the Foundation for Fundamental Research on Matter (FOM), Technology Foundation STW, Netherlands Organisation for Health Research and Development (ZonMw), Netherlands Genomics Initiative (NGI), ACTS and ICTRegie.
- b. Other funding agencies

For each grant state the project title, project number, applicant(s), funding council/division/agency, date of award, and the number of personnel provided for by the grant. Indicate how many of the positions are still open on 1 October 2011.

9. *Current grant applications*

Please provide any relevant information about grant-proposals on the same research topic submitted by you or other members of your research group or the research group of your co-applicant(s) to other funding agencies including other NWO divisions.

10. *Full description of the proposed research*

TOP applications maximum 10 pages, incl. figures; ECHO applications maximum 5 pages, incl. figures. The following aspects should be covered:

- a. objective(s);
- b. approach and planning;
- c. innovative aspects;
- d. justification of the requested budget;
- e. scientific embedding of the proposed research: background, (inter)national position, collaborations relevant for this research topic.

11. *Summary for non-specialists*

Provide a popular title and short summary (maximum 50 words, preferably in Dutch) for your proposal. This summary can be used for publicity purposes if your application is granted.

12. *Publications*

Add a publication list with the most important publications of the applicants during the past five years (maximum 25 in total for main- and co-applicants together).

13. *For TOP grants only: past performance (maximum 2 pages)*
Describe what you have achieved in the previous five years, the most important results, international position, partnerships with other research groups and (co)funding of your research.

3.5 Specific conditions

The specific conditions that apply upon granting of a TOP grant, an ECHO project grant or an ECHO-STIP grant are specified on the websites www.nwo.nl/cw/top and www.nwo.nl/cw/echo. The NWO general terms and conditions apply unless these specific conditions or this TOP/ECHO Call for proposals provide otherwise.

3.6 Submitting an application

- An application can only be submitted to NWO via the electronic application system Iris. Applications not submitted via Iris will not be admitted to the selection procedure. A main applicant is obliged to submit his/her application via his/her own Iris account. If the main applicant does not have an Iris account yet then this should be created at least one day before the submission via www.iris.nwo.nl. Then any possible registration problems can still be solved on time. If the main applicant already has an Iris account then he/she does not need to create a new account to submit a new application. For technical questions, please contact the Iris helpdesk (see section 5.1.2).
 - The application must be submitted as a PDF document via www.iris.nwo.nl and should arrive no later than 28 September 2011 (23:59 hrs). If you need help converting your application form into a PDF document, you should request this in good time from your ICT service or the Iris helpdesk.
 - You have the option of proposing referees for your application via the Iris system.
 - If you want CW to exclude certain researchers as a referee for your proposal then you must inform the CW office by email and provide your reasons for this. You can submit a maximum of three non-referees. Send your email to topecho@nwo.nl. Your email should arrive no later than 28 September 2011.
 - You should be aware that the summary you provide in the Iris system and the summary for non-specialists can be used for publication purposes (for example on the Internet), should your application be granted.
 - In accordance with the agreement between NWO and the Association of Dutch Universities (VSNU), applicants should inform their employing institute of the submission. You should send a copy of your application to the scientific director or dean of your institute or department. If you submit a proposal, CW will assume that you have informed your institute and that your university or institute accepts the granting conditions of this programme.
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4 Assessment procedure

4.1 Procedure

The NWO Code of Conduct on Conflicts of Interest applies to all persons and NWO staff involved in the assessment and/or decision-making process.

Proposals

- Proposals are submitted via Iris, the electronic submission system of NWO according to the guidelines (see section 3.6).
- Applicants must indicate the most suitable focus area in which the proposal should be assessed. CW has three focus areas: Chemistry in relation to Biological/Medical sciences, Chemistry in relation to Physics/Materials and Chemistry in relation to Technology/Sustainability. A description of these focus areas is given in chapter 1.
- A pre-selection of the proposals may be necessary if the number of applications is too large. This procedure will take place shortly after the deadline for submissions. In this procedure the least-promising proposals will be excluded from the main procedure on the basis of an analysis made by the assessment committees. This process will not involve the use of referees or a peer-review procedure. A pre-selection process will keep the administrative load of the referees within acceptable limits.

Eligibility

CW checks the eligibility of the proposals, i.e. whether the proposal meets the formal criteria in sections 3.1–3.6. Only applications that meet all criteria can be taken into consideration.

Assessment

- The CW Board will assess the suitability of the proposals within CW at the start of the procedure (criterion 1 in section 4.2).
- CW will collect suggestions for referees from the applicant himself, study groups, assessment committees, colleagues, etcetera.
- National and international referees will assess the proposals for criteria 2–4 (section 4.2).
- Applicants will be given the opportunity to respond to the referees' reports in writing with a rebuttal. The length of the rebuttal is maximally 2 pages A4, including figures.

Composition of committee

The CW Board appoints the assessment committees, at least one per focus area. The number of committees per focus area depends on the number of applications. The candidates for these committees will be nominated by the boards of the study groups. The CW Board will appoint suitable committees drawn from a pool of candidates. During this procedure every effort will be taken to ensure that the committee members have as large a level of independence and expertise as possible. The committees will be responsible for ranking both the TOP grants and the ECHO project/ ECHO-STIP grants within its focus area.

The assessment committees in the 2010-2011 round are available on the website (www.nwo.nl/cw/top).

Ranking

- The CW Board will appoint one or more assessment committees for each focus area.

- The committee will discuss and rank the proposals during a meeting. They will have copies of the proposals, referee-reports and rebuttals. The committee will weigh the arguments of the referees (also between the referees) and the applicant's rebuttal and will issue both a final opinion and a ranking. If the committee considers the referee-reports insufficient to form its opinion, it can make an additional assessment.
- The committee uses the referees' arguments and the applicant's rebuttal to arrive at an independent opinion on the application. The committee's role differs in this respect from that of the referees, because:
 - The committee takes account of the applicant's rebuttal, while the referee does not see it and cannot take it into account;
 - The committee considers all applications, reports and rebuttals, while the referee, as a rule, never sees more than one application and the referees do not coordinate their opinion between themselves.
 This means that the committee may arrive at a different assessment to the referees.
- The committee will rank the proposals for the TOP grants and ECHO project/ECHO-STIP grants separately.

Final decision

The CW Board will take the final decisions about which proposals to grant within the three focus areas, based on the rankings from the assessment committees. The distribution of the funds between the three focus areas is not fixed in advance nor is the number of TOP grants and ECHO project/ECHO-STIP grants to be awarded; the CW Board reaches a decision about this based on the findings of the assessment committees.

Schedule

Mid July 2011	Call, brochure, application forms and guidelines available
28 September 2011	Final deadline for submitting proposals (23.59 hrs)
November 2011 – February 2012	Obtaining opinions from referees
February/March 2012	Opportunity for rebuttal
March 2012	Assessment committees rank the proposals
April 2012	Funding decisions by CW board
April/May 2012	Applicants are notified about funding decisions

N.B. the schedule will be adjusted should a pre-selection procedure be necessary.

Applicants can follow the assessment procedure at their Iris-account.

4.2 Criteria

The following assessment criteria apply to both TOP grants and ECHO project/ECHO-STIP grants:

1. Suitability within CW.
2. Scientific quality of the research proposal in terms of approach, methods, feasibility, infrastructure, international position and long-term importance for the research area.
3. Innovative character, in terms of originality of the research problem, molecular/chemical aspects and the approach chosen.

For the TOP grants an extra criterion applies:

4. Past performance / track record; this can include: scientific achievements to date, results from previous TOP grants, quality and embedding of the group, publications, grants obtained, forms of recognition, Centre for Science and Technology Studies (CWTS) analyses, Association of Dutch Universities (VSNU) research assessment exercises, etcetera.

5 Contact and other information

5.1 Contact

5.1.1 Specific questions

The application forms can be downloaded from (www.nwo.nl/cw/top and www.nwo.nl/cw/echo). For specific questions about TOP Grants, ECHO Project Grants and ECHO-STIP Grants and this call for proposals please contact:

dr M.M.E. (Margot) Snel, tel. +31 (0)70 344 07 58, email m.snel@nwo.nl or
dr V.V. (Varsha) Kapoerchan, tel. + 31 (0)70 349 44 42, email
v.kapoerchan@nwo.nl .

5.1.2 Technical questions about the electronic application system Iris

For technical questions about the use of Iris please contact the Iris helpdesk. Please read the Iris manual before consulting the helpdesk.

The Iris helpdesk is available from Monday to Friday from 11.00 to 17.00 hours on +31 900 696 4747. Unfortunately not all foreign phone companies allow you to phone to a 0900 number in the Netherlands. You can also send your question by email to iris@nwo.nl .

5.2 Other information

No other information available.

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Visitor's address:
Anna van Saksenlaan 51
2593 HW The Hague

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