

The European Research Council

ERC Grants Overview and Novelties in WP 2024

Christine Courillon

**“Synthetic Chemistry & Materials”
Research program agent**

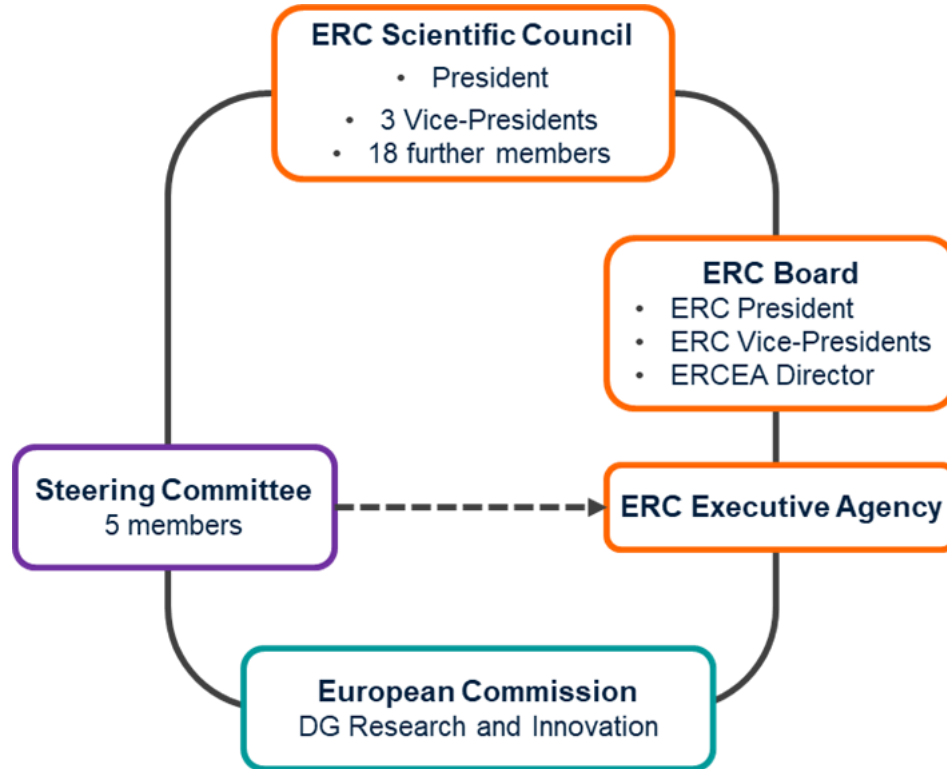


European Research Council

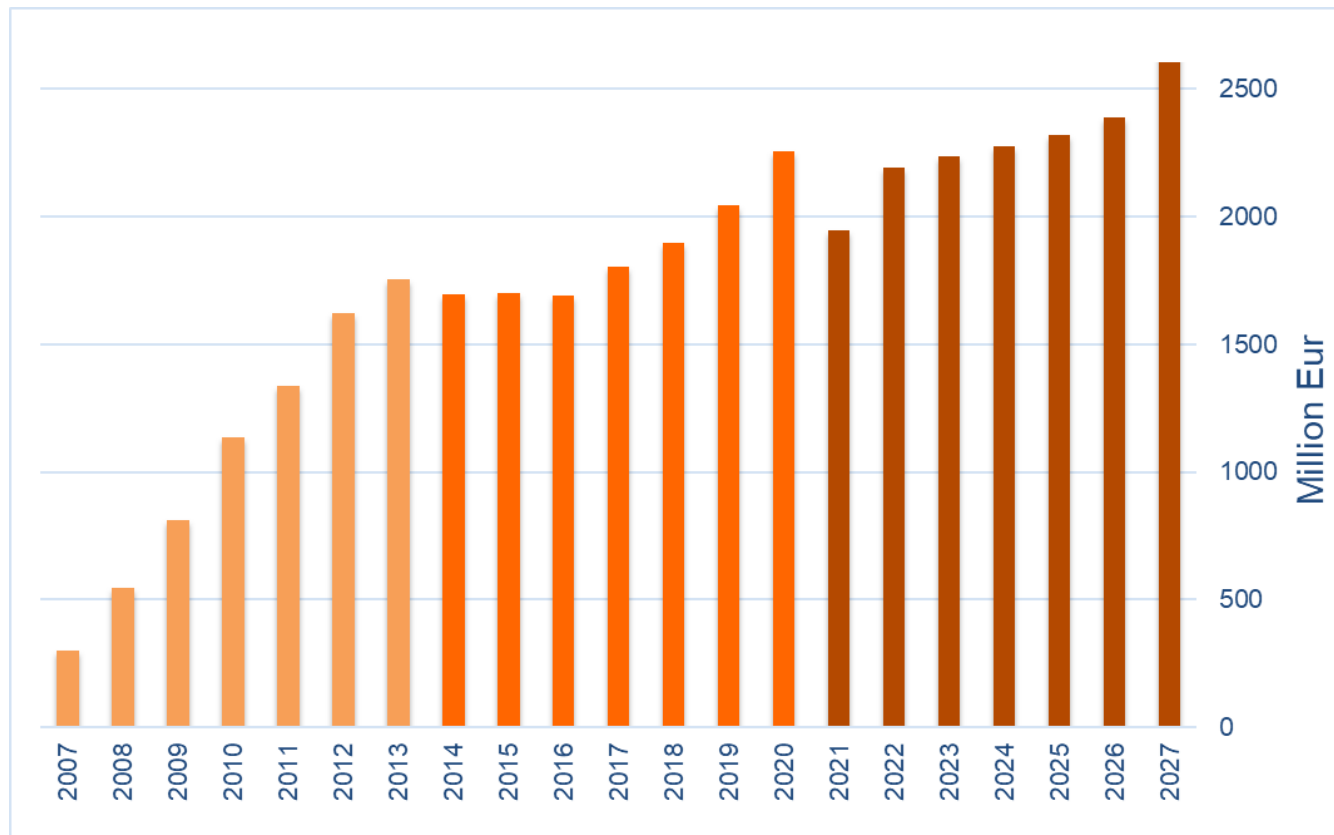
Established by the European Commission

**ERC and national support measures for researchers in Poland
September 28th 2023**

European Commission and ERC

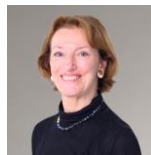


ERC budget 2007 – 2027: EUR 36.5 billion



- FP7: €7.5 billion
- H2020: €13 billion
- HE: €16 billion

ERC Scientific Council



Maria LEPTIN
(Biology)
ERC President



Eveline CRONE
(Psychology)
Vice-President



Eystein JANSEN
(Earth Science)
Vice-President



Jesper SVEJSTRUP
(Biology)
Vice-President



Geneviève ALMOUZI
(Biology)



Harriet BULKELEY
(Geography)



Ben FERINGA
(Organic Chemistry)



Mercedes GARCÍA-ARENAL
(History)



Gerd GIGERENZER
(Psychology)



Tom HENZINGER
(Computer Science)



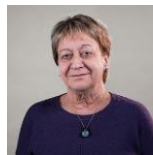
Liselotte HØJGAARD
(Medicine)



Dirk INZÉ
(Plant Biology)



László LOVÁSZ
(Mathematics)



Chryssa KOUVELIOTOU
(High-Energy Astrophysics)



Sylvie LORENTE
(Mechanical Engineering)



Luke O'NEILL
(Biochemistry & Immunology)



Björn OTTERSTEN
(Electric Engineering)



Giovanni SARTOR
(Law)



Nicola SPALDIN
(Materials Theory)



Alice VALKÁROVÁ
(Physics)



Milena ŽIC FUCHS
(Linguistics)



ERC in figures



Over **13,000**
top researchers funded since
the ERC creation in 2007



Over **90,000**
researchers and other professionals
employed in ERC research teams



Over **2,400**
patents and other IPR applications
generated by ERC funding



Over **400**
start-ups identified as founded
or co-founded by ERC grantees



Over **220,000**
articles from ERC projects published
in scientific journals



Over **900** research institutions hosting
ERC grantees – universities, public or
private research centres in the EU or
Associated Countries



89
nationalities of
grant holders



12 Nobel Prizes, **6** Fields Medals, **11** Wolf Prizes
and other prizes awarded to ERC grantees



Why to apply for ERC grant?

ERC offers independence, recognition & visibility to:

- work on a research topic of own choice
- gain financial autonomy for five years
- negotiate the best conditions of work with the host institution
- attract excellent team members and collaborators from anywhere in the world
- move with the grant to any place in Europe if desired (“portability of grants”)
- win additional funding

ERC grant schemes



Starting Grants

starters (2-7 years after PhD) up to € 1.5 Mio
for 5 years



Consolidator Grants

Consolidators (7-12 years after PhD) up to € 2 Mio
for 5 years



Advanced Grants

track-record of significant research achievements in the
last 10 years up to € 2.5 Mio
for 5 years



Synergy Grants

2 – 4 Principal Investigators up to € 10.0 Mio for 6
years
1 PI can be based outside EU/Associated
Countries



Proof-of-Concept

bridging gap between research - earliest stage of marketable innovation
lump sum €150,000 for ERC grant holders

Eligibility window

The first PhD shall have been successfully defended

> 2 and \leq 7 years prior to 1 January 2024

StG 2024

> 7 and \leq 12 years prior to 1 January 2024

CoG 2024

Cut-off dates: Successful defense of first PhD

from 1 January 2017 to 31 December 2021 (inclusive) **StG 2024**

from 1 January 2012 to 31 December 2016 (inclusive) **CoG 2024**



Extensions of eligibility window for StG / CoG

Extension of the ten-year track record for AdG

- Maternity – 18 months per child (before or after PhD)
- Paternity – actual time taken off
- Military service / Sickness (> 3 months)
- Medical speciality training
- Caring for seriously ill family members

No limit to the total extension



Who can apply to ERC?

- **Any nationality, any age** and any current place of work
- In conjunction with an EU / Associated Country Host Institution
- At least 50% of the time in EU or Associated Countries

Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo*, Moldova, Montenegro, North Macedonia, Norway, Serbia, Tunisia, Türkiye, Ukraine and UK



Attractive features for researchers

- Grantees can **keep affiliation** with home institute outside Europe / as well as Team Members
- **Additional funding : 1M€**
moving to Europe / equipment / access to Infrastructures / other major experimental & field work costs
- **Grantees can move within EU with their grant**



ERC Starting Grants (2-7 y past PhD)

- **Objective:** support excellent PIs at the stage at which they are **starting** their own independent research team or program
- **Grant size:** €1.5M (possibility of additional up to €1M)
- **PI Profile:**
 - Potential for research independence
 - At least one publication as main author or without PhD supervisor
 - 50% of PI's time in the project + 50% in the EU or AC



ERC Consolidator Grants (7-12 y past PhD)

- **Objective:** support excellent PIs at the stage at which they **may still be consolidating** their own independent research team or program
- **Grant size:** €2.0M (possibility of additional up to €1M)
- **PI Profile**
 - Has achieved a certain degree of research independence
 - Several publications as main author or without PhD supervisor
 - 40% of PI's time in the project + 50% in the EU or AC



ERC Advanced Grants

- **Objective:** established & active research leaders with a **recognised track-record of research** achievements in the last 10 years
- **Grant size:** €2.5M (possibility of up to additional €1M)
- **PI Profile**
 - Significant track record in the last 10 years
 - Supervision of early-career stage researchers
 - 30% of PI's time in the project + 50% in the EU or AC



ERC Synergy Grants

- **Objective:** Very highly ambitious projects: "*global leadership*"
Interdisciplinarity encouraged, **but not required**
- **Grant size:** Normally up to €10M (+ €4M) – over 6 years
- **PI Profile:** 2 - 4 PIs – Any profile (StG, CoG or AdG)



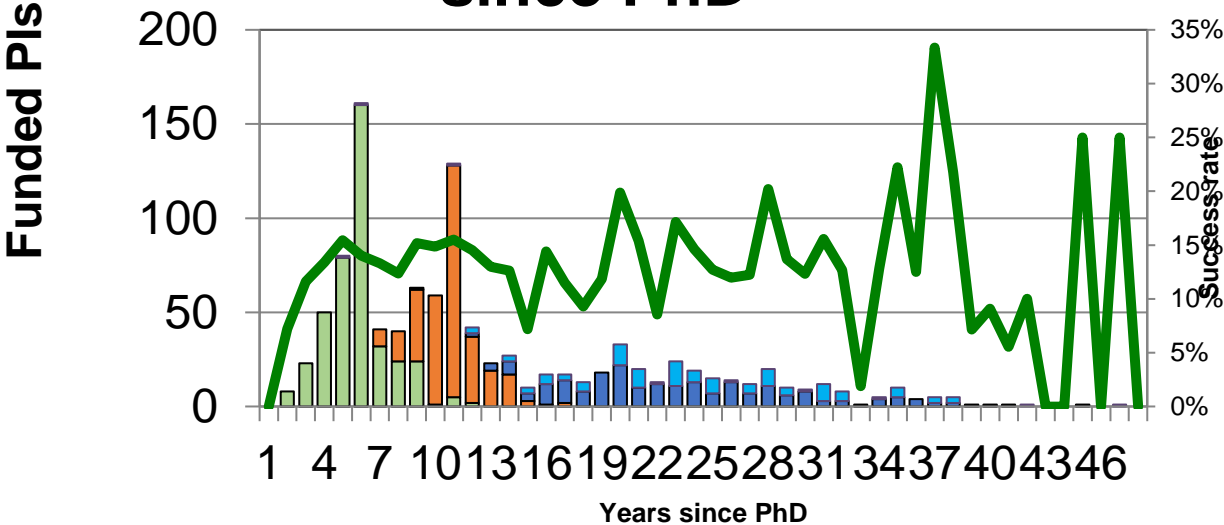
Overview of 2022 calls

2022	StG	CoG	AdG	SYG	Total
# Evaluated 2022	2838	2168	1588	355	6949
Change from 2021	-29%	-17%	-8%		
# Grants	408	321	218	35	1072
Success rate	14%	15%	14%	10%	
Amount awarded EU (M€)	636	659	544	354	2193 M €
Female participation	41%	36%	23%	27%	
Avg. size grants (M€)	1.56	2.05	2.49	10.1	
% of total spending	29%	25%	30%	16%	
Median age Grantee	35	40	50	50	



Success rate : 2022 – Academic age (years since PhD)

ERC 2022 Success rate by years since PhD



How to prepare & submit an ERC research proposal?

ERC Panel structure: LS

Life Sciences

- **LS1** Molecules of Life: Biological Mechanisms, Structures & Functions
- **LS2** Integrative Biology: From Genes and Genomes to Systems
- **LS3** Cell Biology, Development, Stem Cells & Regeneration
- **LS4** Physiology in Health, Disease and Ageing
- **LS5** Neuroscience and Disorders of the Nervous System
- **LS6** Immunity, Infection and Immunotherapy
- **LS7** Prevention, Diagnosis & Treatment of Human Diseases
- **LS8** Environmental Biology, Ecology & Evolution
- **LS9** Biotechnology & Biosystems Engineering



How to prepare & submit an ERC research proposal?

ERC Panel structure: PE

Physical Sciences & Engineering

- **PE1** Mathematics
- **PE2** Fundamental Constituents of Matter
- **PE3** Condensed Matter Physics
- **PE4** Physical & Analytical Chemical Sciences
- **PE5** Synthetic Chemistry and Materials
- **PE6** Computer Science & Informatics
- **PE7** Systems & Communication Engineering
- **PE8** Products & Processes Engineering
- **PE9** Universe Sciences
- **PE10** Earth System Science
- **PE11** Materials Engineering



How to prepare & submit an ERC research proposal?

ERC Panel structure: SH

Social Sciences and Humanities

- **SH1** Individuals, Markets and Organisations
- **SH2** Institutions, Governance & Legal Systems
- **SH3** The Social World and its Interactions
- **SH4** The Human Mind and Its Complexity
- **SH5** Texts and Concepts
- **SH6** The Study of the Human Past
- **SH7** Human Mobility, Environment, and Space
- **SH8** Studies of Culture and Arts



PE5 Synthetic Chemistry & Materials

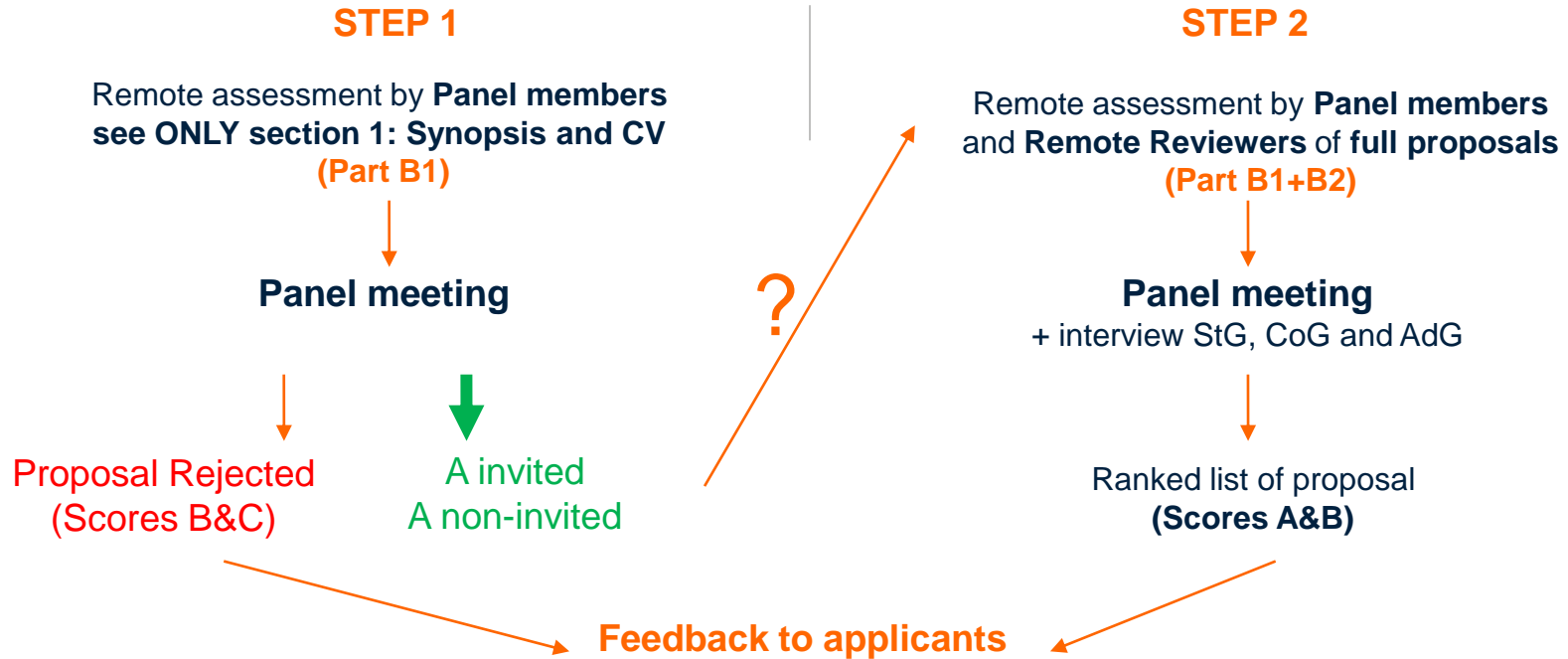
New materials and new synthetic approaches, structure-properties relations, solid state chemistry, molecular architecture, organic chemistry

- Structural properties of materials
- Solid state materials chemistry
- Surface modification
- Thin films
- Ionic liquids
- New materials: oxides, alloys, composite
organic-inorganic hybrid, nanoparticles
- Biomaterials synthesis
- Intelligent materials synthesis, self-assembled materials
- Coordination chemistry
- Colloid chemistry
- Biological chemistry & Chemical Biology
- Chemistry of condensed matter
- Homogeneous catalysis
- Macromolecular chemistry
- Polymer chemistry
- Supramolecular chemistry
- Organic chemistry
- Medicinal Chemistry



Evaluation: process

For individuals calls: a single submission but a two-step evaluation



At the end of step 1 Evaluation: **Novelties**

- **Evaluation:**
 - No budget multiplier in StG, CoG, AdG: **up to 44 proposals per panel in Step 2**
 - **New A-score at Step 1** (StG, CoG, AdG, SyG):
 - **'A invited'** – *high quality proposals to pass to Step 2*
 - **'A not invited'** – *high quality proposals exceeding the threshold for Step 2, but not subject to resubmission restrictions*
- **New resubmission restriction: applicants selected for funding and preparing a grant agreement in a 2023 ERC call, may not apply to StG, CoG, AdG in 2024 ERC calls**



Excellence

is the sole evaluation criterion

Excellence of the Research Project

- Ground breaking nature
- Scientific impact
- Scientific Approach

Excellence of the Principal Investigator

- Intellectual capacity
- Creativity
- Commitment

2024 Calls - Research Assessment

- Evaluation is **primarily** focused on the **proposed research project**
 - Ground-breaking nature, ambition, and potential impact
 - Feasibility of the scientific approach
- Intellectual capacity, creativity, and commitment of the PI also evaluated, with a focus on the extent to which the PI has the required scientific expertise and capacity to successfully execute the project



Evaluation criteria: Project at step 1

Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development between or across disciplines)?



Evaluation criteria: Project at Step 1

Scientific Approach

To what extent is the outlined scientific approach feasible bearing in mind the extent that the proposed research is ground-breaking (*based on the Extended Synopsis*)?



Evaluation criteria: Project at Step 2

Scientific Approach

To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project (*based on the research proposal*)

To what extent are the proposed timescales, resources and PI commitment adequate and properly justified (*based on the research proposal*)?



New CV and Track Record – 2024 Calls

- No prescriptive Principal Investigator profiles
- Personal details: education, employment
- Research achievements (≤ 10):
 - demonstrating advancement in the field
 - emphasis on more recent achievements
 - short narrative on significance of achievements
- Peer recognition: prizes, fellowships, academy membership, etc.
- Additional information:
 - career breaks, diverse career paths, life events
 - other contributions to research community



Evaluation criteria: PI at step 1 / 2

No prescriptive PI profile

To what extent has the PI demonstrated the ability to conduct ground-breaking research?

To what extent does the PI provide evidence of creative independent thinking?

To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

Exceptional / Excellent / Very Good / Good / Non-competitive



Preparing your interview: Some tips and advice

If invited to step 2 (StG, CoG & AdG) / step 3 (SyG)

- Get Panel Members interested in you and what you are doing
- Practice thoroughly, several (many?) times; a presentation followed by questions
- Panels want to see that these are *your* ideas
- Expect questions on evaluation criteria, budget...



Provisional Call Calendar – Work Programme 2024

	<i>Starting Grant</i>	<i>Consolidator Grant</i>	<i>Advanced Grant</i>	<i>Synergy Grant</i>	<i>Proof of Concept Grant</i>
<i>Call opens</i>	11/07/2023	12/09/2023	29/05/2024	12/07/2023	16/11/2023
<i>Call deadline (cut-off date)</i>	24/10/2023	12/12/2023	29/08/2024	08/11/2023	14/03/2024 17/09/2024
<i>Budget (m EUR)</i>	601	584	578	400	30



Where can you find more information?



Videos - ERC Classes

- What to consider before applying
- How to fill in the application
- The interview
- How the evaluation works.

[Click here to watch!](#)

Good luck and thank you for your attention!

christine.courillon@ec.europa.eu

More information:
erc.europa.eu



Follow us on social media



@ERC_Research



European-Research-Council



European Research Council



ERC_Research



European Research Council