

## DSTI-NRF Centre of Excellence for Integrated Mineral and Energy Resource Analysis









## DSTI-NRF CIMERA is holding its ANNUAL STAKEHOLDER ENGAGEMENT SESSION

Wednesday 4 June 2025 2 – 4pm via MS Teams Click here to join

## The session is open to all interested current and future collaborators

#### **BROAD AGENDA:**

- Update on DSTI-NRF CIMERA
  - 2026 funding applications
    - Q&A

Enquiries to cimera@uj.ac.za

### **AGENDA**

Welcome

Context

3<sup>rd</sup> Funding Cycle

2025 / 2024 feedback

NRF (FM / NS)

CIMERA 2026 Call for projects

General Q&A



## DSTI-NRF Centre of Excellence for Integrated Mineral and Energy Resource Analysis

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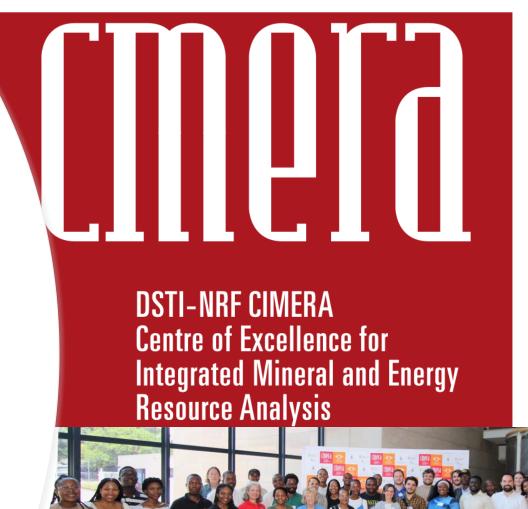






## **DSTI-NRF CoE Initiative**

- CoE's are national assets
- Aims:
  - PG training
  - Fundamental and applied research
- CIMERA
  - Geoscience for society
  - Economic geology





#### **OUR MISSION**

To serve as a vibrant central hub for research and human resource development in mineral and energy resource analysis in Africa

Upskilling Africans to meet the future technical, social, environmental, and economic challenges in geosciences focussing on economic geology





## SCIENCE **TECHNOLOGY** AND INNOVATION **DECADAL PLAN** 2022-2032 Science, technology and innovation enabling inclusive and sustainable South African development in a changing world

## Four societal grand challenges

- 1. Climate change and environmental sustainability
- 2. Future-proofing education and skills
- 3. Re-industrializing the modern economy
- 4. The future of society

Plus STI priorities health and energy innovation





## 3<sup>rd</sup> FUNDING CYCLE 2024 - 2028

#### Based on

- (a) the positive outcome of the CoE Funding Instrument Evaluation concluded in 2023,
- (b) considering the strategic priorities of the Decadal Plan, which implements the 2019 White Paper on Science, Technology, and Innovation,
- (c) the continued contribution of CIMERA to the National System of Innovation.









### Geology research at DSTI-NRF CIMERA — The leading CoE in Economic Geology in South Africa.

DSTI-NRF Centre of Excellence (CoE) for Integrated Mineral and Energy Resource Analysis (CIMERA) is hosted by the Department of Geology at the University of Johannesburg (UJ) and co-hosted by the School of Geosciences at the University of the Witwatersrand (Wits). The CoE is funded by the Department of Science, Technology and Innovation (DSTI) and the National Research Foundation (NRF). The DSTI mandates CoEs to supplement funding through collaborative industry and internationally funded projects.

We welcome the opportunity to discuss collaborative research in economic geology to benefit society.

We offer = A collaborative environment: Network with well-known and seasoned researchers across 12 universities in South Africa and International institutions = Cutting-edge projects: Gain insights into groundbreaking initiatives in economic geology = Funding opportunities, local and international: Secure financial support for your postgraduate studies or research projects = Workshops, short courses and an annual research colloquium.

Moving forward in sustainable economic mineral and energy resource development in Africa!













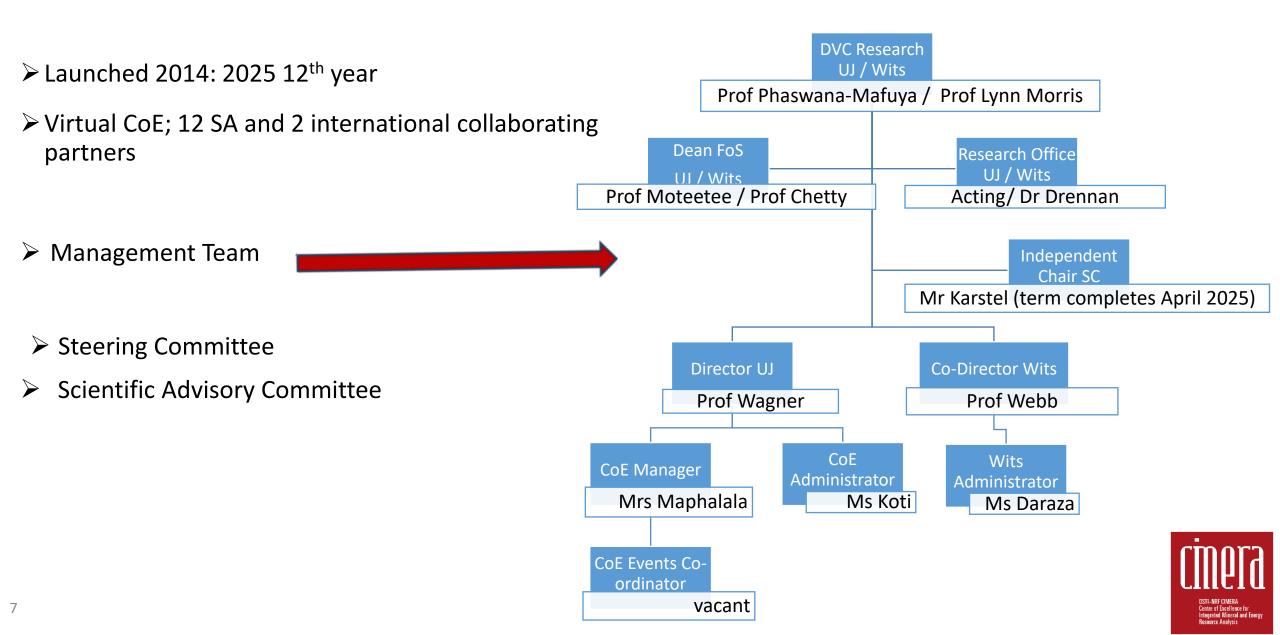








## STRUCTURE & STAFFING 2025



## **TEAM MEMBERS 2025**

## 59 ACADEMIC / UNIVERSITY STAFF FUNDED

#### **Contract Instrument Scientists**

Miss Anna Molekwa (UJ, LA-ICP-MS); Mrs Gabrille Ficq (UJ, MLA) Ms Rachel May (Wits, Isotope Lab); Dr Saumik Samanta (Wits, WIGL)



INSTITUTION	SCIENCE TEAM	SUPPORT TEAM /COLLABORATOR
UJ	8	9
WITS	13	4
RU	1	
UCT	5	
UFS	3	
UFH	3	
UL	1	1
UKZN	3	
UP	2	
SU	3	
UV	1	1
UWC	2	
TOTAL	45	14

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**UJ & Wits Stellenbosch University (SU) Rhodes University (RU) Founding Partners** (2014 / 2015)**University of Fort Hare (UFH) University of Pretoria (UP) University of Venda (UV) Subsequent Partners University of Cape Town University of Free State University of the Western Cape** University of Limpopo (UL) (2020) University of KwaZulu Natal (UKZN) (2021) North-west University (in progress) **International Partners** Helmholtz Freiberg Institute (HFI) for Resource Technology (Germany) University of Patras, Greece (2022) Akita University, Japan (in progress) **Additional Partners** Council for Geosciences of South Africa (2021) AngloAmerican Kunene project (2020) CoP Oil and Gas **International / contract research partners** International Continental Drilling program (ICDP) Moodies project (contract signed at UJ) (ICDP) Bushveld Complex project (Wits).

AngloAmerican Kunene Complex project (UJ, Wits, UP) 9

## **EXTERNAL COLLABORATIONS**







INTERNATIONAL CONTINENTAL SCIENTIFIC DRILLING PROGRAM





MANDELA MINING PRECINCT MINDS FOR MINES











9-12 February 2026

CTICC, Cape Town







Community of Practice (CoP) in Petroleum Geosciences

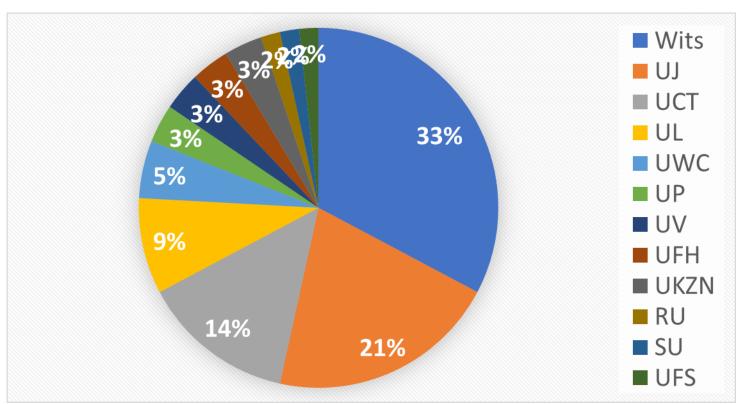


Degree	<b>Funding type</b>	#
MSc	FCS	10
PDRF	FCS	9
PhD	FCS	8
PhD	EG	5
MSc	RC	4
MSc	PCS	4
PhD	RC	4
MSc	RC	3
PhD	URC	3
PDRF	not in 2024	1
PhD	FCS, HCID	1
MSc	URC	1
Hons	FCS	1
MSc	EG	1
MSc	URC	1
PDRF	RC	1
PhD	PCS	1
MSc, Phd,		
PD	Kunene	11

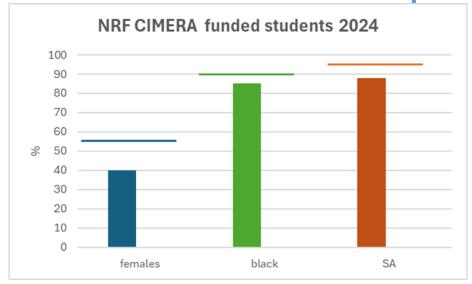
Gender	Core studen	t 2024		
	Grand 7	Total .		%
Female	14	14		41
Male	20	20		59
Dawaa suan bia	Cura va d	Tatal	ш	0/
Demographic	Grand	iotai	#	%
Non-SABF	1	1		
non-SABM	3	3		
SABF	11	11		
SABM	13	13		
SAWF	3	3		
SAWM	3	3	30	88
Race	Grand	l Total		%
Black	27	27		<b>79</b>
White	7	7		21

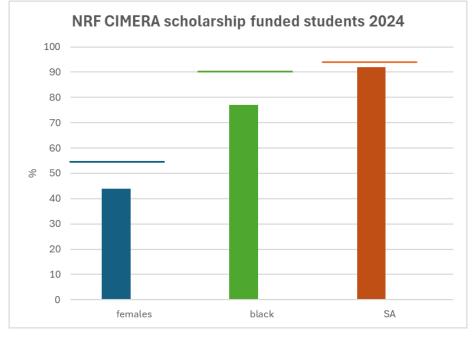
**Grand Total** 

## **Distribution by university**



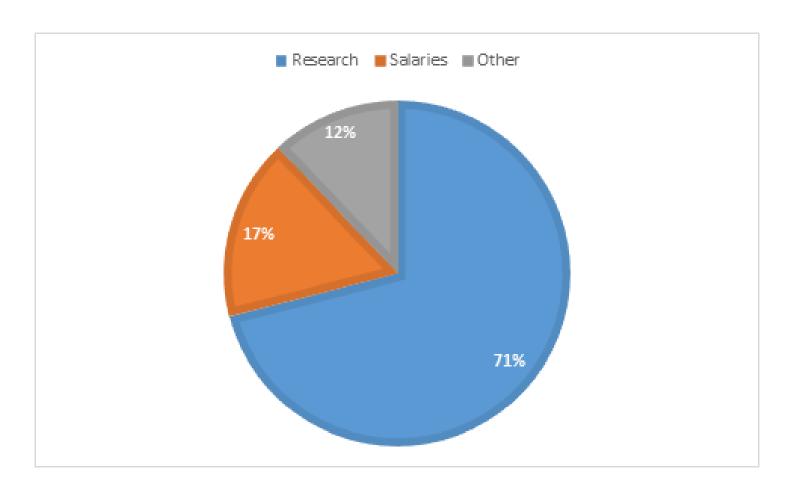


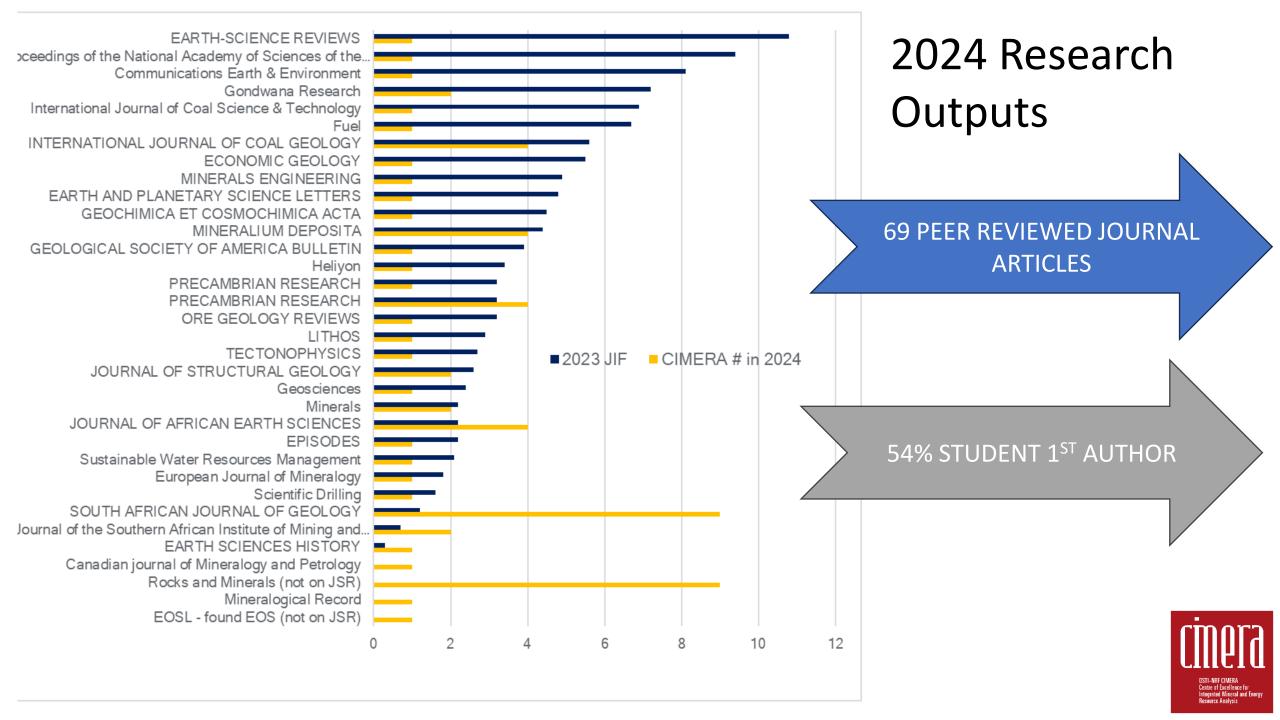




## 2025 Budget distribution

- Research allocation includes FCS, PCS, PDRF stipends
- And project running cost support
- And supervisor (discretionary) funds





Conference Title	#CIMERA	Country
100 years of Merensky Reef	1	RSA
12th International Kimberlite Conference	7	USA
SEG 2024: Sustainable Mineral Exploration and Development	20	Namibia
22nd Conference of the Palaeontological Society of Southern Africa (PSSA), 8-13 September 2024, Graaff-Reinet, SA	1	RSA
22nd Swiss Geoscience Meeting, Basel 8-9 Nov	2	Switzerland
American Geophysical Union Fall Meeting, Washington DC, USA	2	USA
Conference: XI Congreso Geológico de España	1	Spain
EGU24	1	Austria
Goldschmidt Chicago	1	USA
IMSG 2024, University of KwaZulu-Natal, South Africa	5	RSA
International Geological Congress	1	Korea
NSG 2024 5th Conference on Geophysics for Mineral Exploration and Mining	8	Finland
SAIMM Southern African Rare Earths 2nd International Conference, Swakopmund, Namibia, 19 – 20 June 2024.	4	Namibia
The 20th International Symposium on Deep Seismic Profiling of the Continents and their Margins, SEISMIX 2024	3	Sweden
The Society for Organic Petrography, Mongolia, Sept 2024	1	Mongolia
World of coal ash Conference, Grand Rapids, USA, 13 – 16 May, 2024	1	USA
XI Spanish Geological Meeting, Avila 2-6 July	1	Spain

147 CONFERENCE PRESENTATIONS



## Courses / workshops / symposia / colloquia / conferences

#### Three focus area symposiums / workshops were organised by CIMERA

- i. Second Coal CRM Research Symposium (Focus Area 7); Appendix 12
- ii. Deep and Early Earth Research Symposium (Focus Area 7)

## Three international workshops (short courses) were hosted by the CoE under X4P:

- 1. 5-7 June: Introduction to Predictive Metallurgy.
- 2. 10 -11 June: 2<sup>nd</sup> Earth Observation Short Course.
- 3. 18-19 November: Sustainability and ESG for Mineral Sourcing.

#### One international and one local conference were co-sponsored:

- i. Society for Economic geology (SEG), Namibia
- ii. GSSA African Showcase, South Africa

#### Conference / colloquium / symposium arranged by DSTI-NRF CIMERA:

CIMERA Annual research Symposium, UJ



#### INVITATION

We are delighted to invite you to the DSTI-NRF CIMERA Annual Research Colloquium and the University of Limpopo inaugural Geoscience Research Colloquium to celebrate the opening of the New Earth Science Building at University of Limpopo.

## 24-25 November 2025 [CIMERA Colloquium] 26 November 2025 [University of Limpopo Colloquium]

New Earth Science Building, University of Limpopo, Polokwane. Accommodation options to be provided.

Transport from Johannesburg to Polokwane will be provided.

#### 24 November 2025

CIMERA Collaborator Presentations + Posters, Networking Event.

#### 25 November 2025

CIMERA Collaborator presentations.

Soft Skills session in collaboration with WIMSA.

#### 26 November 2025

University of Limpopo Colloquium (Open to all Geoscience students)

DSTI-NRF Collaborator abstracts submission by 15 September 2025 to cimera@uj.ac.za, maximum 400 words.

University of Limpopo abstract submission by 15 September 2025 to Ramakadi at kgoetja.ramakadi@ul.ac.za

CIMERA students are to present at the CIMERA Colloquium.

Non-CIMERA funded students are to present at the UL Colloquium.













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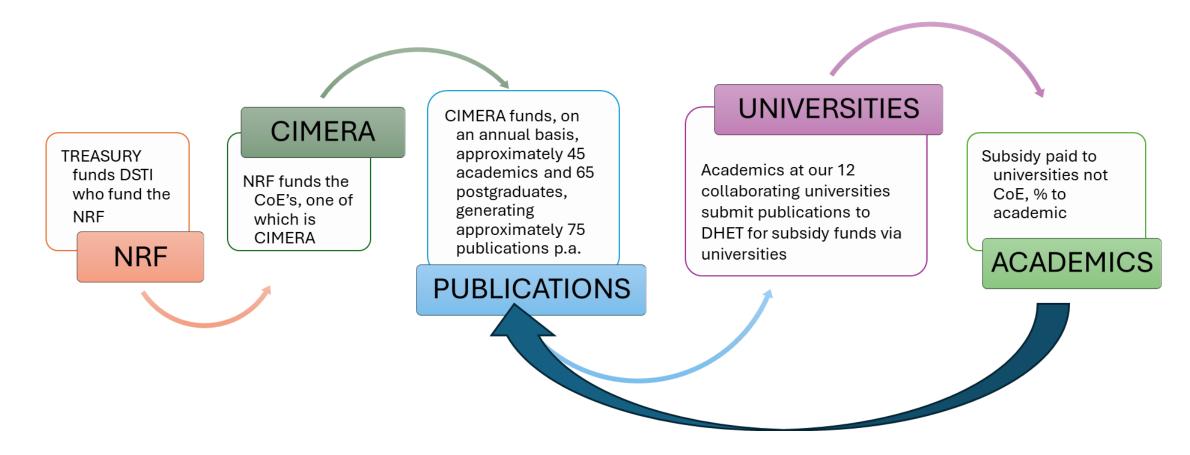




## RETURN ON INVESTMENT

- ➤ 68 students affiliated with CoE in 2024
- > 23 graduations (11 with a PhD)
- > 42 academic staff; total 127 staff funded
- > 12 SA institutions
- ➤ 69 peer reviewed publications
- > 54% student 1st author, 20% female 1st author, 42% black 1st author
- ➤ 147 conference presentations
- ➤ Inter-university Kunene project in collaboration with Anglo-American
- > ICDP & BVDP

## PUBLICATION SUBSIDY GENERATED - untapped funding source



Estimated R8 280 000 in 2024 paid to the universities



## **IMPACT**

- DSI Decadal Plan 2022-2023 three societal grand challenges:
  - 1. Climate change and environmental sustainability
  - 2. Future-proofing education and skills
  - 3. Re-industrializing the modern economy
  - 4. The future of society
- Communication / information flow via social media footprint
- Short courses, wider reach
- DMRE invitation to present / facilitate
- Awards students and academic staff
- Growing team locally and internationally
- X4P HIF International Research School



Today's research ... tomorrow's innovation

2024/2025 NSTF-South32 Awards



Recognising and celebrating an outstanding contribution to science, engineering, technology (SET) and innovation in South Africa

#### DSTI/NRF Centre of Excellence for Integrated Mineral and Energy Resource Analysis (CIMERA)

Nicola Wagner, Director

Communication Award for outreach and creating awareness (by a team or individual over the last 5 years)



Presented: 21 May 2025

NSTF Executive Director

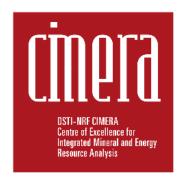
## GEOCONGRESS 2025 DSTI-NRF CIMERA WORKSHOP: 24 June 2- 3:45pm

## BRING ALONG IDEAS TO FURTHER SUPPORT AND GROW CIMERA

WHERE SHOULD WE BE GOING?
LIFE AFTER 2028?

**BRAINSTORM IDEAS** 

### SPONSOR AND EXHIBITOR



#### CIMERA Workshop

The Geocongress provides an ideal opportunity for DSI-NRF CIMERA collaborators, Focus Area Champions, Alumni, industry, students, government, and other interested people to connect, discuss, and workshop the Centre of Excellence (CoE) role in the geoscience community and the future. As the CoE continues with its 3rd funding-cycle, the Management team would like to workshop the long-term plans for CIMERA, gaining insight from all participants. The Focus Area Champions will provide feedback on activities within the 10 CIMERA focus areas, and future plans under the respective themes. This is an ideal opportunity to workshop new research projects and connect with students.

Session date and time: Workshop will take place on Tuesday 24 June.

Time: 14:00 - 15:45

Venue: Digital Scholarship Centre in the UFS Library (Level 8)

Registration costs: No costs

## CIMERA must transition to mainly industry or external grant funding to continue as a research centre

NRF does support the concept of the long-term existence of the CoE as a national research centre.

Greatest asset: multi-university collaboration

## **ACKNOWLEDGEMENTS**

- •NRF CoE colleagues
- •Researchers, staff, and students involved in DSTI-NRF CIMERA
- •UJ graphics, Linguistics, procurement, HR, finance
- •External partners and industry affiliates
- •Ms Viwe Koti, Miss Lizzie Tau, Miss Khanya Matiwane, Ms Zintle Daraza, Dr George Henry
- •Prof Judith Kinnaird, Co-Director, Wits and EGRI
- •Respective Deans and HoD's
- •Steering Committee and Scientific Advisory Committee
- •The DSTI-NRF CIMERA Steering Committee members and Scientific Advisory Committee members



Your contributions have made DSTI-NRF CIMERA the very active and successful CoE that it is!

# Questions / discussion / requests

FAQ – refer to the website





DSTI-NRF CIMERA Centre of Excellence for Integrated Mineral and Energy Resource Analysis











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## CALL FOR PROJECT FUNDING 2026

FOR SCHOLARSHIPS LINKED TO NRF-FUNDED RESEARCH

PHD PROJECTS
MSC PROJECTS
HONOURS PROJECTS

AND

POSTDOCTORAL PROJECTS

NON-BURSARY PROJECTS (RUNNING COSTS ONLY)

RESEARCH ASSOCIATE PROJECTS

OUTREACH PROJECTS

ALL SCHOLARSHIPS-LINKED APPLICATIONS MUST ALSO BE SUBMITTED VIA THE NRF WEBSITE

CIMERA call opens 15 May 2025 CIMERA call closes 4 July 2025

Refer to NRF website for NRF application deadlines

Submissions to: cimera@uj.ac.za / Subject line: 2026

Enquiries: cimera@uj.ac.za / Subject line: 2026

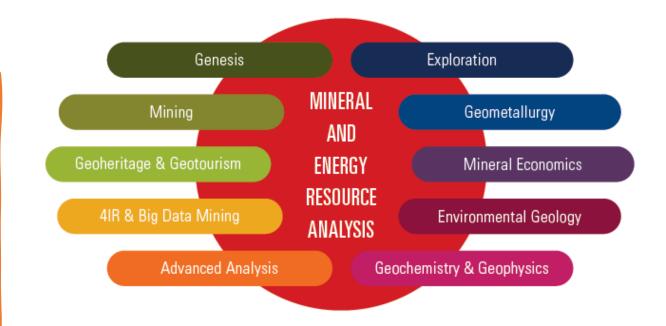
All academics are encouraged to submit new project proposals related to the broad fields of economic geology and geology for society.

DSTI-NRF CIMERA will only consider bursary applications for South African black students.

All other students must apply under the NRF Free-Standing Call. Running cost only projects may be submitted linked to any student demographic.

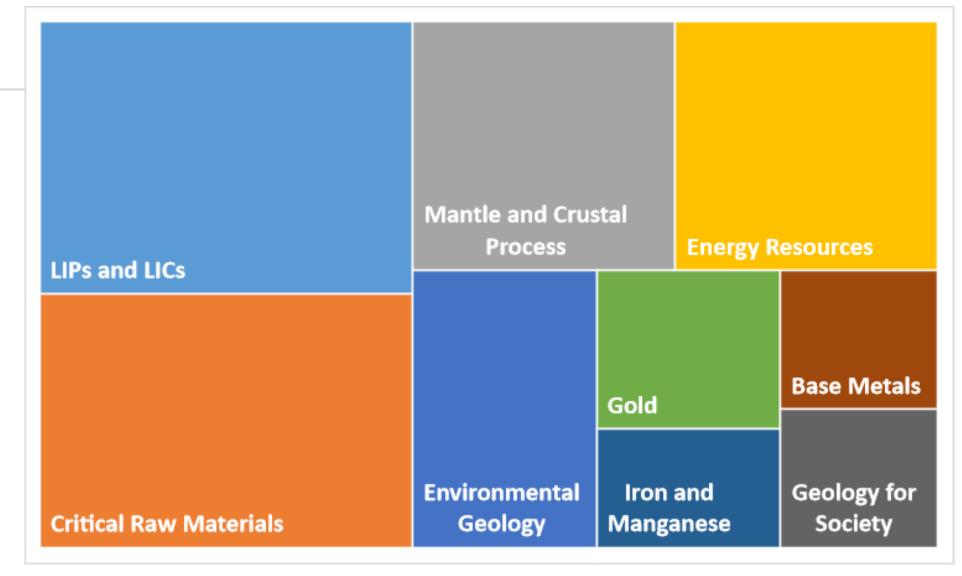


## RESEARCH FOCUS AREAS



#### **Focus Areas 2024**

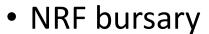
- 1. Mantle and Crustal processes, and associated metallogenesis
- 2. Metallogeny and palaeogeographic implications of LIPC's and LIP's.
- 3. Gold metallogenesis and metallurgy
- 4. Manganese and iron ore deposits
- 5. Critical raw materials
- 6. Base metals
- 7. Energy resources
- 8. Environmental geology
- 9. Geology for society
- 10. Technology & innovation (new)





## BENEFITS OF PARTCIPATING UNDER CIMERA





- CoE top-up
- Project running costs
- Supervisor running costs
- CoE administrative support / NRF CoE team
- Events, courses, marketing, social media
- Annual Research Colloquium
- Outreach projects
- Additional analytical, conference, travel support (on motivation)
- Part of a large geoscience research partnership

































DSTI-NRF CIMERA Centre of Excellence for Integrated Mineral and Energy Resource Analysis











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## CALL FOR PROJECT FUNDING 2026

FOR SCHOLARSHIPS LINKED TO NRF-FUNDED RESEARCH

PHD PROJECTS
MSC PROJECTS
HONOURS PROJECTS

AND

POSTDOCTORAL PROJECTS

NON-BURSARY PROJECTS (RUNNING COSTS ONLY)

RESEARCH ASSOCIATE PROJECTS

OUTREACH PROJECTS

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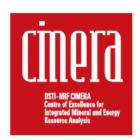
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## science, technology & innovation Department: Science, Technology and Innovation Expression of South Africa







#### PLEASE READ CAREFULLY

#### DSTI-NRF CIMERA GOAL AND FOCUS

DSTI-NRF CIMERA serves as a central hub for research and human resource development in mineral and energy resource analysis in Africa The primary focus of DSTI-NRF CIMERA is to perform high-quality, world-leading, basic and applied research on the vast mineral and fossil fuel resources in, not only South Africa but in Africa as a whole. The knowledge so obtained ensures optimum and sustainable extraction and utilization of natural resources. This is aligned with one of the South African Government's national strategies, recognizing that mineral and fossil energy resources represent cornerstones of the country's economy. Geologists, geophysicists, and mineralogists appear on the South African Critical Skills list (Gazetted February 2022, updated in October 2023), and a minimum degree of a MSc is suggested.

DSTI-NRF CIMERA is funded by the Department of Science and Innovation (DSI) and the National Research Foundation (NRF), with contributions from the University of Johannesburg and the University of the Witwatersrand, the respective host and co-host institutions. Centres of Excellence (OcFs) are mandated by the DSI to supplement funding through collaborative industry and internationally funded projects. CIMERA has Memoranda of Understanding with twelve local universities, the South African Council for Geoscience and four international institutions. Academics are encouraged to make use of these existing ties to increase local and intercontinental collaboration.

DSTI-NRF CIMERA places much emphasis on funding postgraduate student bursaries and running costs for student research projects in economic geology in order to ensure the supply of properly qualified human resources for the future of the mineral and energy resource industries on the continent and abroad. Over 70% of the funds allocated to DSTI-NRF CIMERA by the NRF directly supports research projects. Our NRF budget will not increase in 2025, and

with collaborators based at 12 geoscience departments in South Africa, funding is competitive. Applicants are encouraged to seek co-funding.

#### 2. NRF SCHOLARSHIP APPLICATIONS: Online

All NRF scholarship-linked (Hons, MSc, PhD) proposals must be submitted by the identified student on the NRF system (please consult the NRF and your institution for further information and deadlines.

NOTE: Grant holder-linked students i.e., applicants who have been recruited to work under the CoE MUST choose 'Scholarship linked to NRF-funded research' under the relevant academic level.

DSTI-NRF CIMERA will review the project proposals and NRF applications once the universities have verified the applications (note previous degree mark and student applicants age requirements).

All students considering upgrading from MSc to PhD are required to apply through the NRF online call. Funding for the conversion degree is not automatic. The project must be approved/reapproved by the Scientific Advisory Committee (SAC) and approved by the NRF.

No overtime student may be funded through this call; please refer to the online NRF call for extension grants (estimated to be open by mid-August). All students who may be running overtime should apply for extension grant funding.

VIP: PLEASE ENSURE ALL DSTI-NRF
CIMERA-LINKED NRF SCHOLARSHIP
APPLICATIONS INCLUDE THE
CIMERA UID 91487. PLACE SUPERVISOR'S
EMAIL AS THE FIRST REFERENCE AND THE
CIMERA DIRECTOR'S EMAIL ADDRESS AS
SECOND REFERENCE TO ASSIST THE NRF
IN CONNECTING COE-LINKED STUDENTS.









Our Future. Reimagined.



#### 5. FUNDING

The NRF scholarship award is either for a full cost of study (FCS) or a partial cost of study (PCS). The actual value awarded to the student will be determined by the NRF, based on the financial means test. Students with a previous degree mark above 75% should automatically be approved for FCS. DSTI-NRF CIMERA can top-up PCS awards to match the FCS.

#### ALL APPLICANTS ARE ENCOURAGED TO APPLY FOR ADDITIONAL OR ALTERNATIVE

SOURCES OF FUNDING. Grant holders on FCS or PCS funding may receive supplementary funding from another private-sector source, another South African government source, the NRF supervisor's running expenses (SARChl, CoEs, etc.) or any other source (e.g., Merit Awards), provided that the total funding received from the NRF and the other source(s) does not exceed institutional maximum limits for the respective levels of study. Holders of other bursaries can apply to DSTI-NRF CIMERA for running costs and top-up bursaries, if required and where the total amount does not exceed the values noted above. The DSTI-NRF CIMERA strongly encourages funding from industry.

The electronic study device allowance (FCB scholarships only) is provided as a once-off for the duration of the postgraduate studies. Students must apply directly to the NRF for this allowance and not via the CoE.

The supervisor must alert the student to the conditions of the bursary contract with the NRF, signed on the commencement of the study. The contract obligates the student to repay the bursary to the NRF if she/he does not complete their degree. In addition, the student must sign our CoE Specific Grant Conditions shall ists additional conditions sha/he has to accept. The 2nd or 3rd year of funding is only released on receipt of an acceptable annual student progress report (APR) submitted by the supervisor and student. Funding is linked to performance, which is managed by the supervisor.

The NRF requires students to complete their MSc studies in 2.5 years, and PhD studies in 3.5 years; MSc – PhD conversions need to be completed within 4.5 years. NOTE: Funding is for 2, 3 and 4 years, respectively. DSTI-NRF CIMERA funding cannot be used to fund overtime students, even if they previously received a bursary from another source (i.e., DSTI-NRF CIMERA funding cannot support the 3rd or subsequent years of an MSc registration). Students likely to require extension funding must apply on the NRF online system.

Successful PDRF project applications are awarded R320 000 towards the PDRF salary. The PDRF is encouraged to apply for supplementary funding support as per the NRF guidelines.

#### DSTI-NRF CIMERA will continue to provide the following funding towards student project running costs (per project and disbursed by the supervisor):

- Hons: R15 000 (max.)
- MSc: R45 000 (max.)
- PhD: R55 000 (max.)
- PDRF: R50 000 + R15 000 (max.)
- Running costs per supervisor/DSTI-NRF CIMERA Researcher: R45 000 per annum irrespective of the number of projects. (Note: these funds should be used in year awarded as they are NRF funds.)

The above values are the maximum values for the PDRF and non-bursary projects. For short-term intern or research associate projects or outreach projects, please provide a budget as per the template. Please be reasonable with your request. Evidence of collaborative/cofunding is a distinct advantage.

It is highly recommended that an academic identifies 2+ students for a single project, one to apply under CIMERA and the 2nd to apply as a free-standing scholar. This enables a wider net for successful registration. If a student is NOT in the NRF system, they cannot obtain bursary funding from CIMERA.

#### 4. APPLICATION

#### Complete the template

Please complete the WORD template to request funding for 2026 for postdoctoral research, non-scholarship applications/ running cost (RC) only, shorter-term research projects using interns or research associates, and outreach projects, AS WELL AS HONOURS, MSC AND PHD PROJECTS. PDRF applicants do NOT apply via the NRF online system for funding. The CoE funds these applicants directly following confirmation by the NRF.

To obtain CoE funding in 2026, the project must be approved by the SAC. The SAC will meet once all the student applications are received from the NRF. The 12th of July 2025 is the deadline for all CoE applications submitted directly to CIMERA.

Academic staff who already hold DSTI-NRF CIMERA funding, but who have a number of overtime students, may be ineligible to obtain further funding until their current students have completed their studies.

Please complete the project template accurately, providing all the required information. It is a distinct advantage if collaboration with industry, and / or parastatal organisations, and / or other universities (SA and internationally) is evident. The link to economic geology is essential.

Proceed to word template application form





Questions / discussion / requests

LinkedIn: <a href="https://www.linkedin.com/company/cimera-dst-nrf">https://www.linkedin.com/company/cimera-dst-nrf</a>

Facebook: <a href="https://www.facebook.com/CimeraSA">https://www.facebook.com/CimeraSA</a>

Twitter: <a href="https://twitter.com/CimeraSA">https://twitter.com/CimeraSA</a>

Web site: www.cimera.co.za