



Office of International Relations
Indian Institute of Technology
Kharagpur - 721 302



REF: 2305/2024/OIR

Dated: 26.08.2024

NOTE

Sub: Re-submission of documents for Approval for the visit of Dr. W. Huang and Dr. D. Shu from Singapore during 15th Dec, 2024 – 12th Jan, 2025.

With reference to the letter Ref. No. 2198/2024/OIR dated 10.04.2024 (attached for reference as Flag-i) due approval from the Director was obtained on 13.04.2024.

The visit of Dr. Weimin Huang and Dr. Dongwei Shu, originally scheduled between 26th July – 18th August, 2024 was postponed. The revised dates for their visit are from 15th Dec, 2024 – 12th Jan, 2025 as communicated by email dated 26.08.2024 (email attached for reference as Flag-ii).

During this visit, Prof. Shampa Aich of the MME department will be hosting Dr. Huang and Dr. Shu (Flag-iii).

The supporting documents of the visit are enclosed.

This is placed for your kind consideration and approval.

Encl.Flag: (i) Director's approval copy on earlier date of visit

- (ii) Copy of Email correspondence
- (iii) Filled-up Ministry Clearance & Issuance of Visa Form
- (iv) CV of Dr. Huang & Dr. Shu
- (v) Passport copy

Arup K. Roy
26.08.24

Junior IR- Executive

IR-Executive

Dean, International Relations

Director

AK
01.09.2024

**INVITATION LETTER**

Date: 02.09.2024

To:

Dr. Weimin Huang
21 Hillview Terrace, #02-14,
Singapore.

Subject: Invitation to visit the Indian Institute of Technology Kharagpur during 15th Dec, 2024 - 12th Jan, 2025.

Dear Dr. Weimin Huang,

IIT Kharagpur is pleased to invite you during 15th Dec, 2024 - 12th Jan, 2025 to do research project under SPARC scheme.

We have noted your passport details as follows:

Name: Weimin Huang
Nationality: Chinese
Country of present domicile: Singapore
Passport number: E55972042

Place of Issue of passport: Singapore
Issue date of passport: 11.03.2016
Expiry date of passport: 10.03.2026
Date of birth: 27.09.1968

We understand that all expenses related to your visit will be covered by SPARC (Project Code: HTF). We encourage you to bring your own medical insurance during your visit. Prof. Shampa Aich (saich@metal.iitkgp.ac.in) from Metallurgical and Materials Engineering department of our Institute will be the coordinator for your visit. We would be delighted if you accept our invitation and provide your travel plans to Prof. Aich.

I look forward to your positive response. Please feel free to discuss all matters pertaining to your visit with Prof. Aich.

With warm regards,

Sincerely,

Rabibrata Mukherjee
03.09.2024
Dean, International Relations

CC:
(1) Office of Registrar, IIT Kharagpur
(2) Prof. Shiv Brat Singh, HoD-MME
(3) Prof. Shampa Aich, MME

दू. रबिरता मुखर्जी
Dr. Rabibrata Mukherjee
संस्थापका, अंतर्राष्ट्रीय संबंध
Dean, International Relation
भारतीय प्रौद्योगिकी संस्थान खड़गपुर
Indian Institute of Technology Kharagpur

**INVITATION LETTER**

Date: 02.09.2024

To:

Prof. Dongwei Shu
30 Wilby Road, #03-49, The Tessarina,
Singapore 276310.

Subject: Invitation to visit the Indian Institute of Technology Kharagpur during 15th Dec, 2024 - 12th Jan, 2025.

Dear Prof. Dongwei Shu,

IIT Kharagpur is pleased to invite you during 15th Dec, 2024 - 12th Jan, 2025 to do research project under SPARC scheme.

We have noted your passport details as follows:

Name: Dongwei Shu
Nationality: Australian
Country of present domicile: Singapore
Passport number: PB4859300

Place of Issue of passport: Australia
Issue date of passport: 05.05.2022
Expiry date of passport: 05.05.2032
Date of birth: 19.09.1963

We understand that all expenses related to your visit will be covered by SPARC (Project Code: HTF). We encourage you to bring your own medical insurance during your visit. Prof. Shampa Aich (saich@metal.iitkgp.ac.in) from Metallurgical and Materials Engineering department of our Institute will be the coordinator for your visit. We would be delighted if you accept our invitation and provide your travel plans to Prof. Aich.

I look forward to your positive response. Please feel free to discuss all matters pertaining to your visit with Prof. Aich.

With warm regards,

Sincerely,

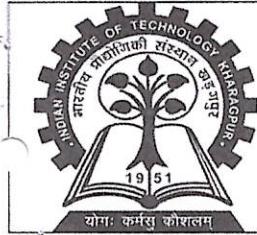
Rabibrata Mukherjee
03.09.2024

Dean, International Relations

CC:

- (1) Office of Registrar, IIT Kharagpur
- (2) Prof. Shiv Brat Singh, HoD-MME
- (3) Prof. Shampa Aich, MME

दू. रविब्रत मुखर्जी
Dr. Rabibrata Mukherjee
दैनिकाचार्य, अंतर्राष्ट्रीय संबंध
Dean, International Relation
भारतीय प्रौद्योगिकी संस्थान खड़गपुर
Indian Institute of Technology Kharagpur



Office of Alumni Affairs & International Relations
Indian Institute of Technology
Kharagpur - 721 302

निदेशक कार्यालय
DIRECTOR'S OFFICE
सं. NO.: 1602
IN 12 APR 2024

REF: 2198/2024/OIR

Dated: 10.04.2024
IN 12 APR 2024
OUT...
मुख्य सं खड़गपुर
IIT KHARAGPUR

NOTE

Sub: Approval for the visit of Dr. W. Huang and Dr. D. Shu from Singapore to do research project under SPARC Scheme (Project Code: HTF) at IITKGP during 26th July – 18th August, 2024.

Dr. Weimin Huang and Dr. Dongwei Shu from Singapore is scheduled to visit IIT Kharagpur during 26th July – 18th August, 2024 to do research project under SPARC Scheme (Project Code: HTF).

The faculty coordinator of their visit is Prof. Shampa Aich of Metallurgical and Materials Engineering department (Flag-i). As per the document submitted it is understood that all expenses related to their visit will be sponsored by SPARC project (Project Code: HTF) (Flag-ii).

The supporting documents of the visit are enclosed.

This is placed for your kind consideration and approval of the said visit.

Encl: (i) Filled up Ministry Clearance Form
(ii) Filled up Issuance of Visa Form
(iii) Sanction letter copy (SPARC)
(iv) Visitors CV
(v) Passport Copy

Arup K. Roy
10.04.24
Junior IR-Executive

Jayson James
Junior Assistant
10/04/24.

~~Assistant Registrar~~

~~Associate Dean AA&IR~~

~~Dean Outreach & AA~~

~~Director~~

Arup K. Roy
10.04.24
Junior IR-Executive

A may please be approved.
Debashish
12/04/2024

Debashish: Pl. ensure that the
CVs of these Professors is enlisted in
our ERP for ranking
advantages?

Approved

JK
13/04/2024

Requesting invitation letter and MoEA clearence for international delegate visit

From : Marupalli Bharatcharangoud <bharatcharangoud@iitkgp.ac.in> Mon, Aug 26, 2024 04:52 PM
Subject : Requesting invitation letter and MoEA clearence for international delegate visit 📎 10 attachments
To : ir-office@adm.iitkgp.ac.in
Cc : saich <saich@metal.iitkgp.ac.in>, tapasendraadhikary mme <tapasendraadhikary.mme@gmail.com>, adeanir@adm.iitkgp.ac.in, shruti@adm.iitkgp.ac.in, skverma@adm.iitkgp.ac.in

Dear Sir/Ma'am,

I am, Marupalli Bharat Charan Goud, a research scholar from Dept. of Metallurgical and Materials Engineering working under supervision of Prof. Shampa Aich. I am writing this email to issue an invitation letter and applying MoEA clearence for two professors from NTU, Singapore who are going to visit our institute to execute a research project under SPARC scheme. We had previously applied for the same in April 2024. However, we have received the MoEA clearence only two days before the planned schedule (26th July to 18th Aug, 2024), which did not provide us with adequate time to make the necessary arrangements. As a result, we were unable to proceed with the planned visit.

Therefore we are submitting a fresh application for their visit from 15th Dec, 2024 to 12th Jan 2025. The necessary documents are attached to this email. Kindly initiate the process at the earliest possible.

Thank you.

Regards

M Bharat Charan Goud,
Research Scholar,
IIT Kharagpur.

— **CV2024 SHU dongwei.pdf**

150 KB

— **DShu-VisaForm.pdf**

483 KB

— **Invitation Letter-DShu.docx**

18 KB

— **Ministry Clearance Form.pdf**

119 KB



Passport copy.jpg

4 MB



**Office of Alumni Affairs & International Relations
Indian Institute of Technology
Kharagpur-721302**

**FORM FOR MINISTRY CLEARANCE
GOVERNMENT OF INDIA
FOR VISIT OF FOREIGN NATIONALS TO
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR, INDIA**

1	Name :	Huang, Weimin
2	Nationality :	PR China
3	Date of birth :	27 Sep, 1968
4	Place of birth :	Jiangsu, PR China
5	Number, Date & Place of Issue of Passport :	E55972042, 11 Mar, 2016, Singapore
6	Visa Number (if available)	
7	Current residential address :	21 Hillview Terrace, #02-14, Singapore
8	Permanent residential address :	21 Hillview Terrace, #02-14, Singapore
9.	Profession :	Associate Professor
10.	Place of Employment:	Nanyang Technological University, Singapore
11.	Academic Credentials:	PhD from Cambridge University, UK
12.	Purpose of visit:	RESEARCH PROJECT UNDER SPARC SCHEME (PROJECT CODE-HTF)
13.	Period of visit:	15-12-2024 to 12-01-2025
14.	Email:	mwmhuang@ntu.edu.sg
15.	Day time Phone:	(65) 84664500
16.	Address of Indian Embassy where you will be applying for your visa:	High Commission of India, 31 Grange Rd, Singapore 239702
17.	Coordinator of your visit at IITKGP/Dept :	PROF. SHAMPA AICH, MME.



**Office of Alumni Affairs & International Relations
Indian Institute of Technology
Kharagpur-721302**

**FORM FOR MINISTRY CLEARANCE
GOVERNMENT OF INDIA
FOR VISIT OF FOREIGN NATIONALS TO
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR, INDIA**

1	Name :	Dongwei SHU
2	Nationality :	Australia
3	Date of birth :	September 19, 1963
4	Place of birth :	Siping, China
5	Number, Date & Place of Issue of Passport :	May 5 2022, PB4859300, Singapore
6	Visa Number (if available)	
7	Current residential address :	30 Wilby Road #03-49, the Tessarina, Singapore 276310
8	Permanent residential address :	30 Wilby Road #03-49, the Tessarina, Singapore 276310
9.	Profession :	Professor
10.	Place of Employment:	School of Mechanical and Aerospace Engineering, N3.2-02-19, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798
11.	Academic Credentials:	PhD, 1990, Cambridge University, UK Bachelor of Science (1984) & Master of Science(1987), Peking University, Beijing, China
12.	Purpose of visit:	RESEARCH PROJECT UNDER SPARC SCHEME (PROJECT CODE-HTF)
13.	Period of visit:	July 26 – Aug 18, 2024
14.	Email:	mdshu@ntu.edu.sg
15.	Day time Phone:	(65)84002103
16.	Address of Indian Embassy where you will be applying for your visa:	31 Grange Rd, Singapore 239702
17.	Coordinator of your visit at IITKGP/Dept :	PROF. SHAMPA AICH, MME.



**Office of Alumni Affairs & International Relations
Indian Institute of Technology
Kharagpur-721302**

Request for issuance of visa invitation letter to foreign citizens

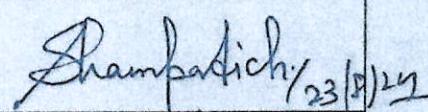
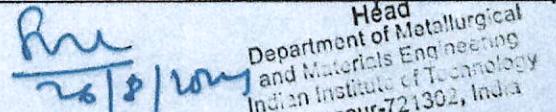
Invitee details	
Name of the visitor:	Huang, Weimin
Address and contact details:	School of Mechanical and Aerospace Engineering Nanyang Technological University, 50 Nanyang Avenue Singapore 639798
Citizenship:	PR China
Date of birth:	27 Sep, 1968
Organization:	Nanyang Technological University, Singapore
Details of visit	
Host Dept/School/ Centre/ Office:	METALLURGICAL AND MATERIALS ENGINEERING
Activity to be undertaken at IITKGP:	RESEARCH PROJECT UNDER SPARC SCHEME (PROJECT CODE-HTF)
Intended duration of stay at IITKGP :	15-12-2024 to 12-01-2025
Support provided by IITKGP (local travel, stay, food, honorarium, any other). Please give details of each type of support with funding source and proof:	ALL EXPENSES ARE SUPPORTED BY SPARC
Support provided by any other organization incl. personal resources. Please give details and proof:	ANY
Invited by	
Name, affiliation and signature of host:	DR. SHAMPA AICH, PROFESSOR <i>Shampa Aich</i> 23/8/2024
Recommended by Registrar/ HoD/ HoS/ HoC/ Dean (as appropriate)	<i>Sine</i> 26/8/2024 Head Department of Metallurgical and Materials Engineering Indian Institute of Technology Kharagpur-721302, India

Please note: Govt. rules will be followed regarding issuance of visa invitation letters



**Office of Alumni Affairs & International Relations
Indian Institute of Technology
Kharagpur-721302**

Request for issuance of visa invitation letter to foreign citizens

Invitee details	
Name of the visitor:	Dongwei SHU
Address and contact details:	School of Mechanical and Aerospace Engineering, N3.2-02-19, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798, (65)67904440(office), (65) 84002103(hp)
Citizenship:	Australia
Date of birth:	September 19, 1963
Organization:	School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore
Details of visit	
Host Dept/School/ Centre/ Office:	METALLURGICAL AND MATERIALS ENGINEERING
Activity to be undertaken at IITKGP:	RESEARCH PROJECT UNDER SPARC SCHEME (PROJECT CODE-HTF)
Intended duration of stay at IITKGP :	15-12-2024 to 12-01-2025
Support provided by IITKGP (local travel, stay, food, honorarium, any other). Please give details of each type of support with funding source and proof:	ALL EXPENSES ARE SUPPORTED BY SPARC
Support provided by any other organization incl. personal resources. Please give details and proof:	None
Invited by	
Name, affiliation and signature of host:	DR. SHAMPA AICH, PROFESSOR 
Recommended by Registrar/ HoD/ HoS/ HoC/ Dean (as appropriate)	 Ranu 26/8/2024 Head Department of Metallurgical and Materials Engineering Indian Institute of Technology Kharagpur-721302, India

Please note: Govt. rules will be followed regarding issuance of visa invitation letters

CURRICULUM VITAE

Dr Huang, Weimin (Associate Professor)

School of Mechanical and Aerospace Engineering, Nanyang Technological University,
Singapore (mwmhuang@ntu.edu.sg)

Dr Weimin Huang is currently an Associate Professor (tenured) at the School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore. With over 25 years of experience on various shape memory materials (alloys, polymers, composites and hybrids), he has published over 200 papers in journals, such as *Materials Today*, *Accounts of Chemical Research*, and *Advanced Drug Delivery Reviews*, and has been invited to review manuscripts from over 300 international journals (including *Progress in Polymer Science*, *Nature Communications*, *Advanced Materials*, and *Advanced Functional Materials*, etc), project proposals from *American Chemical Society*, *Hong Kong Research Grants Council*, etc, and book proposals from *Springer*, *Elsevier* and *CRC*. He has published two books [*Thin film shape memory alloys – fundamentals and device applications* (Cambridge University Press), *Polyurethane shape memory polymers* (CRC)] and is currently on the editorial board of over three dozen of journals. He has over 50 granted patents in China, USA, Singapore and Europe, and is founder/co-founder of five startups in China, Malaysia and Singapore.

a) Professional Preparation

Cambridge University, UK	Structural Eng.	PhD (1998)
Southeast University, Nanjing, PR China	Structural Eng.	MEng (1993)
Southeast University, Nanjing, PR China	Civil Eng.	BEng (1990)

b) Appointments

2005-	Associate Professor, School of Mechanical and Aerospace Engineering, NTU
1999-2005	Assistant Professor, School of Mechanical and Aerospace Engineering, NTU
1998-1999	Lecturer, School of Mechanical and Product Engineering, NTU

c) Example publications

1. Zhou Y, Huang WM, Kang SF, Wu XL, Lu HB, Fu J, Cui HP, From 3D to 4D printing: approaches and typical applications, *Journal of Mechanical Science and Technology*, 29(10), 2015, 4281-4288
2. Wang CC, Huang WM, Ding Z, Zhao Y, Purnawali H, Cooling-/water-responsive shape memory hybrids, *Composites Science and Technology*, Vol. 72, 2012, 1178-1182
3. Sun L, Huang WM, Wang TX, Chen HM, Renata C, He LW, Lv P, Wang CC, An overview of elastic polymeric shape memory materials for comfort fitting, *Materials and Design*, Vol. 136, 2017, 238-248
4. Huang WM, Zhao Y, Wang CC, Ding Z, Purnawali H, Tang C, Zhang JL, Thermo/chemo-responsive shape memory effect in polymers: a sketch of working mechanisms, fundamentals and optimization, *Journal of Polymer Research*, Vol. 19, No. 9, 2012, 9952

NAME: SHU DONG WEI, DAVID
School of MAE, NTU, Singapore 639798 Tel: 6790-4440, Fax: 6790-4062



Education:

1987.1--1990.2, PhD, Cambridge University, U.K.
1980.9--1984.7, BSc, Peking University, Beijing
1984.10--1986.12, MSc, Peking University, Beijing

Work Experiences

1999.4 - 2003.4 Deputy Director, PTRC NTU-Ministry of Defence Joint Research Centre
1993.8—now Lecturer, Senior Lecturer, Assoc Prof, School of MPE, NTU, Singapore;
1992.7--1993.8, Lecturer, Materials Engineering Department, Monash Univ
1991.4--1992.6, ARC Fellow, Centre for Advanced Materials, Sydney Univ
1990.4--1991.4, Research Fellow, Civil Engineering, Waterloo Univ, Canada.

Research Interests

Mechanical properties of 3D printed metamaterials
Drop test simulation of the impact resistance of Seagate Hard Disk Drives
Tube crushing and metal cutting as energy absorbing devices, FEM, experiment, and modelling
Underground shock simulation and blast loading due to explosion, FEM, experiment, and modelling
Delamination in fibre reinforced laminate composite materials

Last 5 years publications, amongst 160+ journal papers (<https://personal.ntu.edu.sg/mdshu/>).

#161 Shiwen Feng, Q.M. Li*, Zhongmin Xiao, Dongwei Shu. Elastic wave propagation in a porous composite with gradient porosity. International Journal of Mechanical Sciences. 265(2024) Received 24 August 2023; Received in revised form 26 November 2023; Accepted 3 December 2023

#160 Yuheng Liu, Dong-Wei Shu, Haibao Lu, Denvid Lau, Yong-Qing Fu. "3D printable spatial fractal structures undergoing auxetic elasticity". Extreme Mechanics Letters. Volume 66, January 2024, 102112 <https://doi.org/10.1016/j.eml.2023.102112>

#159 Yu Heng LIU*, Hai Bo LU, Dong Wei SHU, Wei Min Huang. An epigenetic bistability of structural metamaterials undergoing dual matching shape-memory effects. (submitted to Smart Mater. Struct. Manuscript reference: SMS-114873)

#158 Yu Heng LIU*, Dong Wei SHU, Hai Bo LU. 3D printing shape memory polymer of laminated multi-component metamaterial towards optimization of auxetic and shape recovery behaviors". Smart Mater. Struct. Accepted Jan 9, 2023. Manuscript reference: SMS-114536.R1

#157 Ziyu XING*, Dong-Wei SHU, Haibao LU, Yong-Qing FU. Undirected graphical model of adjacency matrix for dynamic elasticity in polyelectrolyte hydrogels. Polymer 264 (2023) 125531

##156 Chen, Yong; Li, Dongming; Feng, Shuai; Huang, Qiong; Chen, Zheming; Shu, Dongwei. Optimization and thermal-performance deep learning on carbon/epoxy composite panels with microchannel structure for battery cooling. Applied Thermal Engineering Volume 217. 25 November 2022 Article number 119162

Liu, Haibao Lu and Dong-Wei Shu. Programmable hyperbolic out-of-plane deformation of 3D-printed auxetic PLA shape memory arrays. *Smart Materials and Structures*. Accepted Jan 12, 2022

146 Yuheng Liu, Ming Lei, Haibao Lu, and Dong-Wei Shu. Sequentially tunable buckling in 3D printing auxetic metamaterial undergoing twofold viscoelastic resonances. *Smart Materials and Structures*. Volume 30, Number 10, 2021

145 Ngoc San Ha, Guoxing Lu, DongWei Shu, T.X. Yu. Mechanical properties and energy absorption characteristics of tropical fruit durian (*Durio zibethinus*). *Journal of the Mechanical Behavior of Biomedical Materials*. 104 (April 2020) in print

144 Chengxin Du, Dongwei Shu, Zhonghua Du, Guangfa Gao, Meng Wang, Zhengwang Zhu, Lizhi Xu. Effect of L/D on penetration performance of tungsten fibre/Zr-based bulk metallic glass matrix composite rod. *International Journal of Refractory Metals & Hard Materials*. 85 (Dec 2019)

143 Muhammad A. Kariem, Rafael C. Santiago, Reuben Govender, Dong Wei Shu, Dong Ruan, Gerald Nurick, Marcilio Alves, Guoxing Lu, Genevieve S. Langdon. Round-Robin test of split Hopkinson pressure bar. *International Journal of Impact Engineering*. Vol.126 (2019) pp62-75

142 Dongwei Shu, Iram R Ahmad, Jing Xiao. Promising Magnesium Alloys for Mobility and Portability. *Journal of Technology and Social Science*. 2018 Vol 2 No 2 page 1-6

141 Wang, Yonghu; Shu, Dongwei; Yusaku, Fujii; Takita Akihiro, Ishima Tsuneaki and Araki Ryosuke. Comparison between numerical analysis and the levitation mass method measurement test of a spherical structure early impacting water. *ADVANCES IN MECHANICAL ENGINEERING* Volume: 10 Issue: 1 Article Number: 1687814017748076 Published: JAN 6 2018

140 S. C. Liu, G. X. Lu, D. W. Shu, Y. X. Zhou, Z. Y. Zhao, "A New Design of Energy Absorbing Bolt", *Key Engineering Materials*, Vol. 725, pp. 162-167, 2017

137 X.M. Xiang, G. Lu, G.W. Ma, X.Y. Li, D.W. Shu. Blast response of sandwich beams with thin-walled tubes as core. *Engineering Structures*. 127 (2016) 40-48

136* T. Y. Yang · D. W. Shu · B. J. Shi · X. Bai, Effects of disk surface roughness on static flying characteristics of air bearing slider by using a combined method of Reynolds equation and rough disk surface. *Microsystem Technologies*. Accepted: 27 August 2015 DOI 10.1007/s00542-015-2672-7

Visiting Fellow/Visiting Scholar

Cambridge University, 2002; Chinese Academy, Mechanics, 2003



中华人民共和国
民主人民共和国

PEOPLE'S REPUBLIC OF CHINA

照护
PASSPORT

P
类型

国家/Country Code
CHN

E559720
時聞名號/Passion No.

姓名 / Name

民為黃 WEIMIN HUANG

性別/性/性別/性/性別/性

中国 / CHINESE

出生地Place of birth

江苏 / JIANGSU

發地點/Place of issue

SINGAPORE
权威出版社

中国驻新加坡大使馆
EMBASSY OF P.R.CHINA
IN SINGAPORE

0574255951

POCHNHUANG <<WEIMIN <<<<

E559720428CHN6809272M2603106LLMGMOKKMDPBA904

PASSPORT

AUSTRALIA

卷之三

2

卷之二

A black and white portrait of a young man with dark hair, wearing a dark suit jacket, a white shirt, and a dark bowler hat. He is looking slightly to his left with a neutral expression. The background is a plain, light-colored wall.

Code of issuing / Code de l'Etat
State **AUS** émetteur

DOCUMENT No.
PB4859300

Place of birth / Lähiö /

SIPPING

Holder's signature

28

05 MAY 2022

05 MAY 2032

Date of expiry / Date d'expiration

Authority / Autorité

AUSTRALIA

PR68593003A1156300574550760767822281