

Name of Institutions and Contact Persons of Regional Resource Units

Area / Field	RRUs	Country	Address
Access to Clean Drinking Water (Isotope Hydrology)	BARC	India	<p>Bhabha Atomic Research Centre (BARC) - to provide analytical service for isotopes and expert services in isotope hydrology</p> <p>Mumbai 400085 Tel: 91 22 550 5050 ext. 2717 Fax: 91 22 550 5151 E-mail: Contact person: Name: Dr. S.V. Navada Title: Head, Isotope Hydrology Section Dept.: Isotope Applications Division, Address: Bhabha Atomic Research Centre Trombay, Mumbai-400 085</p>
Access to Clean Drinking Water (Isotope Hydrology)	KAERI	Republic of Korea	<p>Korea Atomic Energy Research Institute - KAERI - to provide hosting for trainings on isotopic analysis and hydrological data interpretation</p> <p>150 Duckin-dong, Yusong-ku 305-353, Taejon Tel: 82 42 868 2063 Fax: 82 42 868 2063 E-mail: ncskim1@nanum.kaeri.re.kr Contact person: Name: Chun-Soo KIM (Mr) Title: Principal Researcher (Hydrologist) Dept.: Geoenvironmental Sciences Section Radioactive Disposal Research Team, KAERI Address: PO Box 105 Yusong Taejon, Republic of Korea, 305 - 600</p>
Access to Clean Drinking Water (Isotope Hydrology)	PINST-ECH	Pakistan	<p>Pakistan Institute of Nuclear Science & Technology (PINSTECH) - to provide analytical services for isotopes</p> <p>PO Box. Nilore Islamabad Tel: 92 51 929 0261 Fax: 92 51 929 0275 E-mail: pinstech@paknet2.ptc.pk Contact person: Name: Dr. M. Ishaq Sajjad Title: Head, Radiation and Isotope Application Division Dept.: PINSTECH/ PAEA E-mail: sajjad.pins@pearl3.dgcc.org.pk</p>
Marine Coastal Environment	ANSTO	Australia	<p>RRU for Regional Data Base for Marine Radioactivity Contact Person:</p>

			<p>Name: Dr Ross Jeffree Dept.: Environment Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai NSW 2234 Australia Telephone: 612 9717 3584 Fax: 612 9717 9260 E-mail: ross.jeffree@ansto.gov.au</p> <p>RRU for Fate and Behaviour of Pollutants Contact Person: Name: Dr Ron Szymczak Dept.: Environment Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai NSW 2234 Australia Telephone: 612 9717-9221 Fax: 612 9717 9260 E-mail: ron.szymczak@ansto.gov.au</p> <p>RRU for Off-shore Modelling and Verification Contact Person: Name: Dr Peter Airey Dept: Environment Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai, NSW 2234 Australia Telephone: 612 9717 3272 Fax: 612 9717 9293 E-mail: peter.airey@ansto.gov.au</p> <p>RRU for Harmful Algal Blooms Concerns Contact Person: Name: Dr Henk Heijnis Dept.: Environment Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai NSW 2234 Australia Telephone: 612 9717 3209: Fax: 612 9717 9270 E-mail: henk.heijnis@ansto.gov.au</p>
Marine Coastal Environment	PNRI	Philippines	<p>Philippine Nuclear Research Institute - Harmful Algal Blooms Concerns Contact Person: Name: Ms. Elvira Z. Sombrito</p>

			<p>Section Head, Chemistry Research Section Telephone: +632 9201655, 9296011-19 Fax: +632 9201646 E-mail: ezs@asti.dost.gov.ph or ezsombrito@yahoo.com</p>
Marine Coastal Environment	BARC	India	<p>Bhabha Atomic Research Centre (BARC) - Tracer technology Mumbai 400085 Tel: 91 22 550 5050 ext. 2717 Fax: 91 22 550 5151 E-mail: svnavada@apsara.barc.ernet.in Contact person: Name: Dr. S.V. Navada Title: Head, Isotope Hydrology Section Dept.: Isotope Applications Division, Address: Bhabha Atomic Research Centre Trombay, Mumbai-400 085</p>
Marine Coastal Environment	MINT	Malaysia	<p>RRU for Database on heavy metals and organic pollutants Malaysian Institute of Nuclear Research & Technology (MINT) Bangi, 43000 Kajang, Selangor Tel: 603 8250510 Ext. 1130 Fax: 603 825 2577 E-mail: khalik_wood@mint.gov.my Contact person: Name: Dr. Abd. Khalik Hj. Wood Title: Senior Research Officer Dept.: Industrial Technology Division (MINT) Address: MINT</p>
Marine Coastal Environment	PINST-ECH	Pakistan	<p>Pakistan Institute of Nuclear Science & Technology (PINSTECH) - C-14 and stable isotope techniques PO Box. Nilore Islamabad Tel: 92 51 929 0261 Fax: 92 51 929 0275 E-mail: pinstech@paknet2.ptc.pk Contact person: Name: Dr. M. Ishaq Sajjad Title: Head, Radiation and Isotope Application Division Dept.: PINSTECH/ PAEA E-mail: sajjad.pins@pearl3.dgcc.org.pk</p>
Marine Coastal Environment	MSI	Philippines	<p>Marine Sciences Institute (for description defining the scientific or technical contribution(s) being made, such as tracing, PIXE, NAA, etc, processing of shellfish samples for the extraction of total saxitoxin that would help make available PSP toxin standards, particularly 3H-saxitoxin, to MSs isolation and culture of algal cells and cysts quantification of algal cysts in sediment cores modeling of</p>

			<p>toxic red tides) University of the Philippines Contact Person: Rhodora V. Azanza, Ph.D. Address: Marine Science Institute University of the Philippines Diliman, Quezon City 1101 Telefax: 00632 921-5967 Email: rhod@msi01.cs.upd.edu.ph</p>
Air Quality & Pollution	ANSTO	Australia	<p>RRU on Ion beam Analysis (IBA) Techniques for Fine Particle Characterisation Contact Person: Name: Dr David Cohen Dept.: Physics Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai NSW 2234, Australia Telephone: 612 9717 3042 Fax: 612 9717 3257 E-mail: david.cohen@ansto.gov.au / dcz@ansto.gov.au</p>
Air Quality & Pollution	CIAE	China	<p>RRU for NAA China Institute of Atomic Energy PO Box. 275 - 50 Beijing 102413, China Tel: 86 10 6935 7308 Fax: 86 10 6935 7008 E-mail: tiancia@public.bta.net.cn or wztian@iris.ciae.ac.cn Contact person: Name: Tian Weizhi Title: Professor Dept.: Nuclear Physics Address: CIAE</p>
Air Quality & Pollution	BARC & CCCM	India	<p>For NAA and XRF <u>BARC Address:</u> Bhabha Atomic Research Centre (BARC) Mumbai 400085 Tel: 91 22 550 5050 ext. 2215 Fax: 91 22 550 5151 E-mail: devan@apsara.barc.ernet.in Contact person: Name: Dr. T.M. Mahadevan Title: Scientific Officer Dept.: Environment & Assessment Division Address: Bhabha Atomic Research Centre (BARC)</p> <p><u>CCCM address:</u> Centre for Compositional Characterisation of Materials (CCCM), ECIL Post, Hyderabad-500 062. Tel: 91 040 712 5462</p>

			<p>Fax: 91 040 712 5463 <u>At Mumbai:</u> Tel: 91 22 557 4363 Fax: 91 22 556 2161 E-mail: gangs@cccm.ernet.in Contact person: Name: Dr. S. Gangadharan Title: Project Director Dept.: Centre for Compositional Characterisation of Materials (CCCM), Address: ECIL Post, Hyderabad-500062</p>
Air Quality & Pollution	BATAN	Indonesia	<p>RRU for Air pollution (NAA) BATAN - National Atomic Energy Agency Indonesia PPI-Batan, Kawasan PUSPITEK Serpong, Tangerang 15310 Tel: 62 21 7560905 Fax: 62 21 7560923 E-mail: syamsa@batan.go.id / PCM helia@ibm.net Contact person: Name: Title: Dept.: Address:</p>
Air Quality & Pollution	GNS	New Zealand	<p>RRU for Ion Beam Technologies Institute of Geological & Nuclear Sciences (GNS) PO Box 31-312 Lower Hutt Tel: 64 4 570 4785 Fax: 64 4 570 4657 E-mail: A.Markwitz@gns.cri.nz Contact person: Name: Dr. A. Markwitz Dept.: Isotope Applications Address: as above Alternative contact: W. Trompetter</p>
Air Quality & Pollution	PINST-ECH	Pakistan	<p>Air pollution (NAA) Pakistan Institute of Nuclear Science & Technology (PINSTECH) PO Box. Nilore Islamabad Tel: 92 51 929 0261 Fax: 92 51 929 0275 E-mail: pinstech@paknet2.ptc.pk Contact person: Name: Dr. Shujaat Ahmad Title: Head, Dept.: Analytical Chemistry Group, Nuclear Chemistry Division Address: E-mail: shujaat.pins@pearl3.dgcc.org.pk</p>

Air Quality & Pollution	NUS	Singapore	RRU for Air pollution - PIXE / XRF National University of Singapore (NUS) Dept. Of Physics Lower Kent Ridge Rd Singapore 119260 Tel: 65 8742620 Fax: 65 7776126 Contact person: Name: Prof. Dr. Tang Seung Mun Title: Professor Dept.: Department of Physics Address: NUS E-mail: phytism@leonis.nus.edu.sg
Air Quality & Pollution	VAEC	Vietnam	RRU for Air Pollution – NAA / XRF Prof. Pham Duy HIEN Institute for Nuclear Science and Technology, Vietnam Atomic Energy Commission VAEC Tel: 84 4 5142215, Fax: 84 4 9424133 Email: Pdhen@netnam.vn
Air Quality & Pollution	OAP	Thailand	RRU for Data Analysis/interpretation by use of a receptor model (PMF, PCA, ME) Contact Person: Ms. Wanna Chuenta Office of Atoms for Peace Bangkok, Thailand Tel: +66 2 5620124 Fax: +66 2 5613013 E-mail: chueinta@mail.com
	BARC	India	RRU for Nucleonic Control Systems & Tracers Bhabha Atomic Research Centre (BARC) Mumbai 400085 Tel: 91 22 550 5161 Fax: 91 22 550 5151 E-mail: gsingh@apsara.barc.ernet.in Contact person: Name: Mr. Gursharan Singh Title: Head, NDT, Tracer Technology & Hot Cell Operations. Dept.: Isotope Applications Division Address: Bhabha Atomic Research Centre Trombay, Mumbai-400 085.
Clean & Energy Efficient Production Processes (Radiation Processing)	JAERI	Japan	RRU for Natural Polymer Japan Atomic Energy Research Institute - JAERI 1233 Watanuki, Takasaki, Gunma 370-1292 Tel: 81 27 3469410 Fax: 81 27 3469687 E-mail: kume@taka.jaeri.go.jp Contact person: Name: Dr. Tamikazu KUME

			<p>Title: Deputy Director, Head Dept.: Material Development Address: same as above</p>
Clean & Energy Efficient Production Processes (Radiation Processing)	MINT	Malaysia	<p>RRU Agrowaste Malaysian Institute of Nuclear Research & Technology (MINT) Bangi, 43000 Kajang, Selangor Tel: 603 8250510 Ext. 1130 Fax: 603 825 2577 E-mail: khalik_wood@mint.gov.my Contact person: Name: Dr. Mat Rasol Awang Title: Senior Research Officer Dept.: Radiation Processing Technology Division Address: MINT as above Tel: Ext 1403; E-mail: rasol@mint.gov.my</p>
Clean & Energy Efficient Production Processes (Radiation Processing)	GNS	New Zealand	<p>RRU for Industrial efficiency (Tracers, Sealed Sources and Nucleonic Gauges) Institute of Geological & Nuclear Sciences (GNS) PO Box 31-312 Lower Hutt Tel: 64 4 570 4666 Fax: 64 4 570 4657 E-mail: G.Wallace@gns.cri.nz Contact person: Name: G Wallace Title: Dr Dept.: Address: GNS as above</p>
Electronic Networking & Outreach	ANSTO	Australia	<p>RRU for Distance Learning Materials Contact Person: Name: Celia Hacker Dept.: Safety Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai NSW 2234 Australia Telephone: 612 9717 3560 Fax: 612 9717 9266 E-mail: celia.hacker@ansto.gov.au</p> <p>RRU for Emergency Response Training Contact Person: Name: David Woods Dept. : Safety Division Address: Australian Nuclear Science and Technology Organisation (ANSTO) PMB 1, Menai</p>

			NSW 2234 Australia Telephone: 612 9717 3578 Fax: 612 9717 9266 E-mail: david.woods@ansto.gov.au
Electronic Networking & Outreach	CIAE	China	RRU for Internet & Homepage China Institute of Atomic Energy PO Box. 275 - 50 Beijing 102413, China Tel: 86 10 6935 7308 Fax: 86 10 6935 7008 E-mail: tiancia@public.bta.net.cn or wztian@iris.ciae.ac.cn Contact person: Name: Tian Weizhi Title: Professor Dept.: Nuclear Physics Address: CIAE
Electronic Networking & Outreach	BARC	India	RRU for Networking (offer) Bhabha Atomic Research Centre (BARC) Mumbai 400085 Tel: 91 22 550 5050 ext. 2827 Fax: 91 22 550 5151 E-mail: cakris@magnum.barc.ernet.in Contact person: Name: C.A. Krishnan Title: RCA Liaison Officer Dept.: Technical Co-ordination & International Relations Group Address: Bhabha Atomic Research Centre (BARC)
Electronic Networking & Outreach	MINT	Malaysia	RRU for Internet & Homepage Malaysian Institute of Nuclear Research & Technology (MINT) Bangi, 43000 Kajang, Selangor Tel: 603 8250510 Fax: 603 825 2577 Contact person: Name: Mr. Mohd Amin Sharifuldin bin Salleh Title: Senior Research Officer Address: MINT as above Tel. Ext: 1240; E-mail: amin@mint.gov.my
Tissue Banking	BBC- Mahidol University	Thailand	Bangkok Biomaterial Centre, Siriraj Hospital Mahidol University Contact person: Prof. Dr. Yongyudh Vajaradul Tel: & Fax: +66 2 4112506 E-mail: sivvj@mahidol.ac.th
Tissue Banking	NUH	Singapore	National University Hospital

Gamma Irradiation Services	GISC	Thailand	Gamma Irradiation Service and Nuclear Technology Research Centre (GISC) – RRU on Gamma Irradiation both acute & chronic proposes by gamma facilities and dosimetry Contact Person: Ms. Arunee WONGPIYASATID Tel: +66 2 9428481-2 Fax: +66 2 5795530 E-mail: fscianw@ku.ac.th Kasetsart University Bangkok, Thailand
Geothermal Exploration	PNOC	Philippines	Philippine National Oil Company Contact Person: Mr. Manuel S. OGENA Energy Development Corp. Merritt Road, Fort Bonifacio Makati City, Metro Manila 1201 Philippines Tel: +63 2 8405020 Fax: +63 2 8401580 E-mail: ogena@energy.com.ph
Dam Safety	PINSTECH	Pakistan	Pakistan Institute of Nuclear Science and Technology Pakistan Atomic Energy Commission P.O. Box 1482, Nilore Islamabad Pakistan Contact Person: Dr. M. Ishaq Sajjad Tel: +92 51 9290261 Fax: +92 51 9290275 E-mail: sajjad@pinstech.org.pk / farooq@pinstech.org.pk
Health/Neonatal Screening	NIH	Thailand	Radioisotope Laboratory National Institute of Health Contact Person: Ms. Wiyada CHAROENSIRIWATANA Tel: +66 1 8314101 Fax: +66 2 9511465 E-mail: wiyada@health.moph.go.th
Nitrogen-15 Analysis	PINSTECH	Pakistan	Pakistan Institute of Nuclear Science and Technology Pakistan Atomic Energy Commission P.O. Box 1482, Nilore Islamabad Pakistan Contact Person: Dr. M. Ishaq Sajjad Tel: +92 51 9290261

			Fax: +92 51 9290275 E-mail: sajjad@pinstech.org.pk / farooq@pinstech.org.pk
Production and Purification of ¹²⁵ I-ionated progesterone tracer	RIA Lab.	Thailand	RRU for Service and Training Centre for Production & Distribution of Ionated Progesterone for self-coating RIA of progesterone Contact Person: Ms. Prapaipit SUPRAROP Office of Atoms for Peace Ministry of Science and Technology 16 Vibhavadi Rangsit Road, Chatuchak District Bangkok 10900 Tel: +66 2 5620102 Fax: +66 2 5613013 E-mail: prapaipi@oaep.go.th