'Position Title:	ASTRO 3D Research Scientist in HI Surveys
Position Classification:	Level A
Position Number:	NEW
Faculty/Office:	Faculty of Engineering and Mathematical Sciences
School/Division:	Physics, Mathematics and Computing
Centre/Section:	ICRAR (International Centre for Radio Astronomy Research)
Supervisor Title:	Senior Research Fellow
Supervisor Position Number:	313695

Your work area

ICRAR is a WA State funded high profile equal joint venture established in 2009 between Curtin University and The University of Western Australia (UWA). The Centre's headquarters are located at UWA, with research nodes at both UWA and Curtin. ICRAR is one of the lead Australian organisations participating in the international Square Kilometre Array (SKA) Project. ICRAR has been further funded from 2019 to 2024 with $60 Million by the WA State Government and equal contribution from the Joint Venture Universities. ICRAR is one of the largest astronomy organisations in Australia.

ASTRO 3D is a $40m Research Centre of Excellence led by Prof. Lisa Kewley. ASTRO 3D is funded over seven years by the Australian Research Council and supported by six collaborating Australian universities - ANU, University of Melbourne, University of Sydney, Swinburne University of Technology, University of Western Australia and Curtin University. Other Australian partners in the Centre include CSIRO, the Australian Astronomical Observatory and National Computational Infrastructure. ASTRO 3D includes collaborations with world leading international institutions.

The ASTRO 3D mission is to produce a comprehensive picture of the evolution of matter, the chemical elements, and ionizing radiation in the Universe from shortly after the Big Bang to the present day. ASTRO 3D trains the next generation of scientific leaders and conducts nationwide education and public outreach programs.

The focus of this research position is the WALLABY survey now being conducted with the Australian SKA Pathfinder (ASKAP) telescope by a team of over 100 national and international researchers. WALLABY is focussed on studying the atomic hydrogen content of around 500,000 galaxies in the local Universe. Possible research areas include: Local Group galaxies and high-velocity clouds; the kinematics of Local Volume galaxies; environmental influences on galaxy interactions; galaxy formation and evolution, and cosmology. The UWA node of ASTRO 3D hosts the WALLABY principal investigator Prof Lister Staveley-Smith, project manager Dr Tobias Westmeier, science working group leaders Drs Barbara Catinella, Bi-Qing For, Luca Cortese and Ivy Wong, and strongly collaborates with other WALLABY and ASTRO 3D researchers based at other institutes. This vibrant project strongly connects with other ICRAR and ASTRO 3D observational and theoretical projects, and is an exciting precursor of science with the forthcoming Square Kilometre Array.

ASTRO 3D supports the activities of around 200 researchers, administrative staff and students, provides a collaborative working environment and supports a flexible, family friendly working environment. Subject to visa restrictions, this opportunity is available as either a full-time or part-time position.

Reporting structure

Reports to: ASTRO 3D Chief Investigator

Your role and responsibilities

In their role as UWA academic level A in the International Centre for Radio Astronomy Research, the appointee will be expected to:

- Undertake internationally competitive research in WALLABY HI science, with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national and/or international level.
- Actively collaborate with researchers within ICRAR, CSIRO and other ASTRO 3D nodes and partner institutes.
- Contribute to team efforts to acquire, process and provide quality control for WALLABY survey data.
- Participate, as appropriate, in the supervision of research students, both at the undergraduate and post-graduate level.
- Undertake administrative functions primarily connected to the area of research, including preparation of research proposals and pursuing appropriate funding applications.
- Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
- Comply with, maintain an awareness of and help promote all UWA policies and procedures and in particular those relating to work health and safety and equal opportunity.
- Perform other duties as requested, consistent with the classification level of the position.

Your specific work capabilities (selection criteria)

- PhD in astronomy or related discipline
- Expertise in area of astronomy relevant to the ASKAP WALLABY survey
- Proficiency in verbal and written communication
- Good publication record as evidenced by international refereed publications
- Demonstrated ability to work effectively in distributed scientific collaborations
- An understanding of equal opportunity principles and policies and a commitment to their application in a university context

Compliance

Workplace Health & Safety

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements. Details of the safety obligations can be accessed at http://www.safety.uwa.edu.au

Inclusion & Diversity

All staff members are required to comply with the University's Code of Ethics, Code of Conduct and Inclusion and Diversity principles. Details of the University policies on these can be accessed at http://www.hr.uwa.edu.au/policies/policies/conduct/code, http://www.web.uwa.edu.au/inclusion-diversity