

CATALYST SCIENCE DISCOVERY CENTRE: AN EXCITING PLACE TO BE!

Catalyst Science Discovery Centre is an Independent Discovery Centre and Museum offering a great range of Science lessons and interactive shows, along with 4 award winning galleries, to a wide audience from the North West and beyond.

Catalyst Science Discovery Centre is operated by an independent charitable trust and is located in Widnes in Cheshire giving great accessibility for the whole of the North West and surrounding regions.

The Trust has been in operation some 25 years with Catalyst starting its life as the Museum of the Chemical Industry. The building was extended some 15 years ago to enable



Catalyst to offer a formal Education department with a suite of Educational studios and supporting ante rooms. The philosophy of offering high quality Science Education and providing inspiration for young people to take an interest in science has continued and the Trust has recently added three new facilities with the support of the NWRDA and Millennium ReDiscover.

The Catalyst team aim to provide a stimulating and memorable visitor experience which is based on 3 key principles of being fun, relevant and tangible. Research has shown that these principles help to engage the audience and really make a difference.

THE CATALYST MISSION:

- To engage and excite the audience about Science and its importance in our lives
- To provide high quality and stimulating information to help impact on peoples lives, specifically in the areas of 'Science is all around us', 'Science based careers' and 'Science and its impact on the environment'
- To provide a unique and clearly defined Museum component focused on Chemistry and the History of the Chemical Industry and its impact in the locality

Catalyst opens its doors to some 30,000 visitors per annum. Two thirds of these visits originate from schools, who come to enhance and enrich subjects being covered in school. Of these, 75% of visits are of Key stage 2 and 3 level. The remaining visits are made up of KS1, KS4 and special needs visitors. The remaining third of visits are made from the general public who visit mainly at the weekend or in school holidays.

During weekends and school holidays, a range of additional activities is offered daily; typically these are interactive science shows and/or workshops in addition to make and take activities. Activities are varied from week to week in order to encourage families to make return visits.

The team is led by CEO Julie Burgess-Wilson (Jules) who, along with Chair of the Board of Trustees, Dr Tony Bastock OBE, has been responsible for managing a major change in its fortune from ailing Museum to dynamic Science Discovery Centre.

Jules comments "We believe that the work of Catalyst is vital to promoting the understanding of science and provides an exciting route to the enjoyment of scientific discovery outside of school. We cater for all ages and all abilities. We do not expect to discover great scientists or provide the wider population with a thorough science education, but we do believe it is essential that enquiring minds are stimulated to consider the challenges of this increasingly technological world. Informing and educating the community, especially children, in science and science-based industries is vital to making sure that the public are equipped to make informed decisions about the safety, ethics and the desirability of new technology, such as Nanomaterials, GM foods, Biofuels etc. It is equally important that we all have at least the basic understanding of the challenges of climate change, sustainable development, ozone depletion and other pressing problems."

Engaging the public is vital and the education team is led by inspirational Sue Halliday, a highly qualified education manager, who, having trained as a scientist, later went into



teaching and then to be an educational advisor. The Trust feels it is essential that the educational standards are not only high, but are genuinely inspirational to all who participate, as encouraging people into science is the key *raison d'être* for the Trust.

Chairman Dr Tony Bastock OBE comments, "We see our role as delivering sound scientific knowledge to our visitors, be they classes of young children or senior citizens, to allow them to evaluate the tabloid approach to science of 'grey goo' and 'Frankenstein Foods' and consider its validity or indeed, hysteria."

VISION FOR CATALYST

The Catalyst team believe passionately that inspiring young scientists is vital for the region in view of its deep heritage in science and innovation. Indeed, it is vital for the nation generally, with a projection that STEM-related jobs nationally will increase by 750,000 by 2014.

Catalyst and other Science Centres have a vital role to play not only in helping to attract young people into science but to help educate the public to the wonders of science and its importance on all our lives. We

know that by inspiring people at a young age, there is a higher propensity to continue with an interest in Science and to explore further the possibilities Science has to offer in a chosen career.

KEY CHALLENGES FOR CATALYST: REVENUE FUNDING

Being a charitable trust with limited funds available, it is imperative costs are tightly managed. Catalyst operates with just 3 full time staff, supported by 15 part time employees.

Finance is often precarious especially in the current economic climate; the Trust is funded by a combination of donations, some industry sponsorship and self-generated revenue. Generating sufficient income is a constant challenge. Dr Bastock makes the point, "If we are to provide this essential service to deliver the 'wow' of scientific discovery to a growing number of visitors, new and sustainable funds must be made available. Only with dependable funding will we be able to inspire the scientists and innovators of the future. Committed teachers and helpers, often working as volunteers, even at weekends, funded by erratic and unpredictable revenue income deliver these programmes, at low cost and high efficiency. This is not sustainable, as it does not allow for the development of

our programmes and the growth of our scientific influence. We cannot even be sure of survival with funding on this basis."

ACCOLADES

Last year Catalyst won a national award from the Chemical Industries Association for Promoting Science and Engineering to Future Generations.

At a recent visit to open the latest developments, Lord Sainsbury commented, "It makes such a difference if children, from the very youngest age, are able to see what Chemistry can do and how it plays a vital part in our lives. These new facilities will encourage even more children to open their minds to what chemistry can do in the future and how it can enrich our lives still further."

Steven Broomhead, CEO of the NWDA said: "Catalyst Science Discovery Centre is a unique attraction for the Northwest and the Agency is pleased to have played a part in its transformation. I am sure that the centre's innovative new interactive facilities will help to inspire the scientists of the future, something which is vital to maintaining the Northwest's reputation as a leader for science and innovation."

And more importantly, a typical recent visitor: "I am writing to thank you for a wonderful visit my pupils and I had on the 9th March. We had our very own partying particles workshop, which was wonderful. Please thank Sue again. She has inspired the girls I brought with me, my current year 7s are really looking forward to their year 8 visit to your Discovery Centre."

VITAL SUPPORT

CEO Jules comments "We believe that the work of Catalyst and other science centres across the nation is a vital requirement for today and the future. Stimulating an enquiring mind and giving rise to thought about our surroundings are essential if we are to be able to attract young scientists and innovators for the future and to help inform the public on the increasingly important scientific debates about topics such as GM Foods, Nanotechnology, Bio fuels and Sustainability, and I am passionate that we succeed in our endeavours. Centres like Catalyst can currently only exist through the passion, energy and tenacity of the trustees and staff; we strongly believe we must continue to attract greater audiences and deliver more Science to the public, but we can only do this with the appropriate funding"

THE CATALYST COMPONENTS

Birth of an Industry

A museum gallery, charting the development of the Chemical Industry, supported by a large and growing collection of artefacts and papers relevant to the Industry and locality. Catalyst plans to continue to enlarge the collection and to develop artefact-handling sessions to engage the public.

Scientrific

A deeply popular hands-on gallery for all visitors, Scientrific offers individual exhibits which demonstrate Scientific principals and encourage visitors to discover and probe new concepts.

Observatory

A unique rooftop Observatory gallery affords stunning views from the Welsh hills to the Pennines and is accessed by a wonderful scenic glass lift. The observatory provides a fantastic space for learning about the environment and for viewing Science and Engineering in the locality.

Education Centre

This purpose-built Education suite provides 2 teaching studios and 1 multifunctional room. This space is used predominantly by schools but hosts the family

science sessions in the school holiday periods.

A World of Opportunities - Championing Science Based careers

A highly acclaimed and unique careers gallery featuring young scientists who give a valuable insight into their jobs and career prospects via DVD clips and interactive displays. Young scientists profile their career, their path to success, providing advice for other young people. Young ambassadors tell it like it is and answer the questions most people want to know: salary, the type of work involved, number of holidays, the good and the bad bits!

Alchemy Theatre

The state-of-the-art interactive Alchemy Theatre provides stunning 3D virtual tours, currently providing young scientists with a unique insight in to chemical plants, pharmaceutical development paths and recycling plants – completely unattainable by other means. A groundbreaking and unique concept in education and public engagement combines interactive voting with a "live" tour of facilities impossible to visit and 3D imagery.

Catalytic Laboratory

The exciting, state-of-the-art "Catalytic Discovery Lab" hosts a wide range of hands-on activities and experiments carefully designed to involve and inspire all. Catalyst actively encourages Pupils to participate in laboratory activities as soon as possible, for example pupils of around 8 years old are invited to "Become a Scientist", where they learn how to conduct an experiment. Older pupils at KS4 have access to hands-on activities in a truly inspirational environment.

For further information visit www.catalyst.org.uk

