Journal of Chromatography & Separation Techniques

Market Analysis

Global Meet on Crystallography, Spectroscopy and Structural Chemistry

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The International conference on Crystallography and Structural Chemistry is the platform to gain or share the knowledge in the new technological developments in the field of science, engineering and technology. This conference brings together professors, researchers, scientists, students in all the areas of material science, Crystallography, Spectroscopy, Physics and Chemistry which provides an international forum for the spreading of approved research. We are honored to invite you all to attend and register for the International conference on Crystallography and Structural Chemistry, Crystallography and Applications in Modern Chemistry" which is scheduled for April 27-28, 2020 at Barcelona, Spain.

Global X-ray Crystallography Market

The global X-ray crystallography market is prognosticated to be popularized by the application of the technique for researching protein structures and assessing protein-ligand interactions, protein- nucleic acid complexes, viruses, and enzymes. Besides determining biological macromolecules and protein structure, X-ray crystallography could be used to reconstruct molecular crystalline structures. Commercially, the technique could be engaged to examine crystalline structures in jewels and artifacts, electronic chips, cosmetics, bones and teeth, and DNA and conduct pharmaceutical drug discovery.

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Key Players in this X-Ray Crystallography instruments market are:–

- Philips Healthcare
- Siemens Healthcare
- Toshiba
- Hitachi
- Care stream
- Hologic
- Samsung Madison

Important application areas of X-Ray Crystallography Instruments are also assessed based on their performance.

Market predictions along with the statistical nuances presented in the report render an insightful view of the X-Ray Crystallography Instruments market. The market study on Global X-Ray Crystallography Instruments Market 2018 report studies present as well as future aspects of the X-Ray Crystallography Instruments Market primarily based upon factors on, key trends and segmentation analysis.

Application of X-Ray Crystallography Instruments market are:

- Pharma
- Biotech
- Chemical
- Scientific

The In this study, the years considered to estimate the market size of X-Ray Crystallography Instruments market are as follows:-

- History Year: 2013-2017
- Base Year: 2018
- Estimated Year: 2019
- Forecast Year 2019 to 2024

Mass Spectrometry market:

The growth of this market is majorly driven by technological advancements in mass spectrometry, government initiatives for pollution control and environmental testing, increasing spending on pharmaceutical R&D across the globe, government regulations on drug safety and growing petrochemical industry. However, the high cost of equipment is likely to restrain the growth of the market during the forecast period. The global mass spectrometry market is expected to reach USD 5.27 Billion by 2022 from USD 3.68 Billion in 2017, at a CAGR of 7.4%.

UV/Visible Spectroscopy market:

In the coming years, the market is expected to witness the highest growth rate in the Asia-Pacific region. However, longevity of instruments and dearth of skilled professionals is likely to restrain the growth of the market to a certain extent during the forecast period. Market is poised to reach USD 1,163.2 Million by 2021, growing at a CAGR of 4.3 % during the forecast period of 2016 to 2021.

Major Crystallography Associations around the Globe:

• British Crystallography Association (BCA)

• Indian Crystallographic Association (ICA)

• European Crystallographic Association (ECA)

• French Crystallographic Association (FCA)

• Asian Crystallographic Association (ACA)

• Turkish National Crystallographic Association

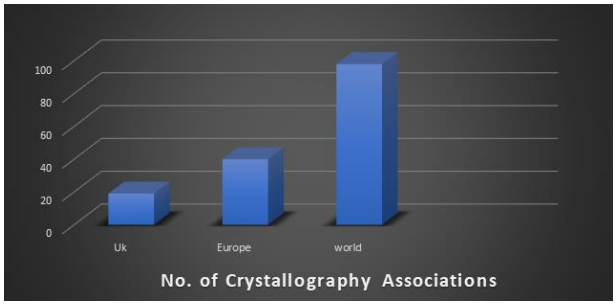
• Croatian Crystallographic Association

• International Union of Crystallography

• German Society for Crystallography

• German Mineralogical Society

• Korean Crystallographic Association



Molecular Spectroscopy Market:

The molecular spectroscopy market is poised to grow at a CAGR of 7.0%, over the forecast period, 2019-2024. The prime factors that are responsible for the growth of the market include rapid adoption in the pharmaceutical industry,

penetration of MS technology in various verticals, and increased emphasis for the discovery of newer molecules by pharmaceuticals. This rising affinity toward this technology has been widely adopted and has resulted in the growth of the market. Molecular spectroscopy is a technology that is widely adopted across the different application sectors, including pharmaceuticals and many others.

There have been continuous efforts in the pharmaceutical industry to undertake advanced research and development that is leading to increased adoption of various spectroscopy techniques, over the forecast period. There has also been an increase in the number of testing and research facilities, particularly in the field of pharmaceuticals. This will lead to the rise in the demand for laboratory and research equipment, such as molecular spectroscopy and other consumables. Hence, all these factors contribute to the increase of the market studied.

Key Market Trends:

NMR Spectroscopy is Expected to Show Highest Growth Over the Forecast Period This has also been found to be non-destructive and is analysed with the help of modern instruments. NMR techniques are also being used successfully in various food systems for quality control and research. NMR spectroscopy is used to determine the structure of proteins, amino acids profile, carotenoids, organic acids, lipid fractions, and the mobility of the water in foods. It is also used to identify and quantify metabolites in foods. In addition, the NMR spectroscopy is increasingly being used in biochemical and biological application areas, including hit and lead discovery, metabolite profiling, and in vivo spectroscopy (MRS) and imaging (MRI). The many new developments seen in the NMR spectroscopy are driving much-needed improvements in sensitivity and versatility. This will lead to the expansion of the number of applications of the technique, and hence, growth in the market studied.

Target Audience:

• Materials Scientists /Research Professors /Spectroscopic Experts

• Physicists /Chemists

• Junior / Senior research fellows of Materials Science /Spectroscopy /Chemical Engineering

• Directors of Materials/ Nanotechnologies /Spectroscopy companies

• Members of different Materials Science, Physics, Chemistry, Spectroscopy, Crystallography Association