Journal of Chromatography Research

Market Analysis

Market Analysis of the 9th World Congress on Chemistry and Medicinal Chemistry

Andrés E. Dulcey

National Center for Advancing Translational Sciences, USA E: dulceyan @mail.nih.gov

The 9th World Chemistry & Medicinal Chemistry Congress on Recent Developments in Chemistry and its Applications in Medicinal Chemistry is a global event taking place in **Prague, Czech Republic** from May 13-14, 2019. This conference offers an international forum for academics, scientists, engineers and practitioners interested in real-time projects that provide solutions to share useful ideas and highlight ongoing work that may lead to a path breaking Chemistry base. It has been projected that the global economy will grow by nearly 4 per cent by 2018, the highest pace since 2011. It also appeared to have a positive outlook on main chemical markets.

The first half of 2018 saw a marked rise in semiconductor materials production. Memory chips are a huge market for companies like Fujifilm and Mihayashi. With regard to the latest display technologies, customer demand and the need for new materials will spur, even as the organic light-emitting diode display market is small but is rising fast. DowDuPont researchers are designing products that can be used in foldable displays, producing new dimensions in the chemical industry.

The new tax laws retained crucial tax credits for the solar and wind industries in the U.S. that generate up to 7 per cent of the nation's electricity. The rising in renewable sources has centred newly on energy storage. The storage market will roughly double in scale, to approximately 600 MW in 2018, according to GTM Research and the Energy Storage Association.

By 2030, the New York State Energy Research & Development Authority has committed to renewable energy providing 50% of the state's electricity, and has invested as part of it in 50 energy storage technology projects. In 2018, the bio-based chemical industry such as Enerkem and Fulcrum Bioenergy attracted corporate support for their project to manufacture waste jet fuels and purpose-grown crops. In the agricultural sector, while Monsanto-Bayer is the biggest seller in the world when it comes to the growth of agricultural data platforms, start-ups are leading developments in automation and agricultural biotechnology. According to the Society of Chemical Manufacturers & Affiliates, sales volume rose by 4.4 per cent last year.

Growth is also anticipated this year due to product innovation on the markets like pharmaceutical, food, and industrial fine chemicals. For example: U.S. In 2017 the Food & Drug Administration approved 46 medications, more than double the amount in 2016. The rise in drug chemicals is driven by customer requirements for complex or highly potent molecules. As the corporate tax rate in the U.S. is smaller, fine chemicals companies would have a better role than Europe. According to the American Chemistry Council (AAC), in 2018, all went well for specialty chemical production due to steady growth in the U.S., continued economic development in Asia, and market renewal in Europe. The trade association forecast a global production rise of 3.0 percent in 2018, following a 2.5 percent increase in 2017. Some industries that rely on specialty chemicals, such as oil and gas drilling, were poor despite a growth in the global economy. Nonetheless, the transition to electric cars and a step away from the use of fluorochemical coolants in home refrigerators are both evidence that demand for specialty chemicals is likely to be on the increase. We expect a output to grow around 3.5 per cent in 2018 in the paint and coatings market. Urethane adhesives, which are used to mount and seal parts of the vehicle body, can foresee an increase in demand. Market demand for personal care chemicals continues to grow mainly for blue filters, said to protect skin from pollution from computer screens and cosmetics formulated to protect skin from air pollutants, according to consulting firms.

AAC says that 2018 will be the year of production, with chemical output increasing by up to 3.7%. Industrial companies have boosted capital investment by 8.7 per cent in 2017, according to the Institute for Supply Management, and will raise it by an further 2.7 per cent this year. The global economy will grow by 3.8 per cent in 2018 a little faster than the projected U.S. pace of 2.6 per cent, according to Deutsche Bank.

End market	End market size and chemical revenue from end market		Current situation (reset/rebound/stable)				Outlook (2010-20			
	Chemical revenue (US\$ billion)	End market size (US\$ billion)	North America	Europe	Asia Pacific	Latin America	Global	North America		
Construction	695	8,016								
Electronics	371	2,458								
Household	159	800								
Agriculture	142	1,772								
Paper and packaging	130	702								
Automotive	128	1,932								
Health care	113	1,368								
Energy	113	3,833								
Transportation	61	1,023								
Nutrition	29	4,022								
Personal care	20	225								
Machinery	15	457								
Apparel and textiles	11	1,097								
Mining and metals	4	1,333								