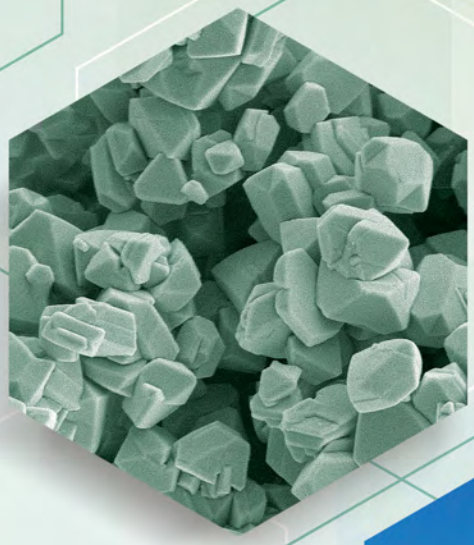
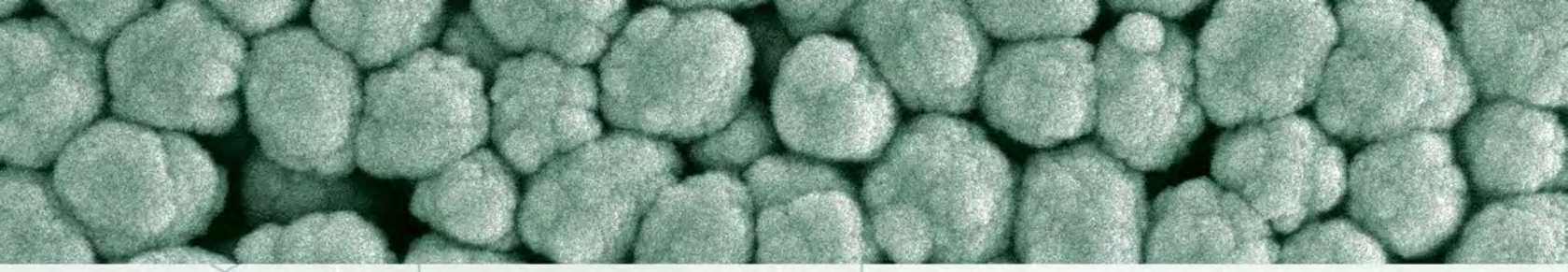


ZEOLYST
INTERNATIONAL



ZEOLYST
INTERNATIONAL

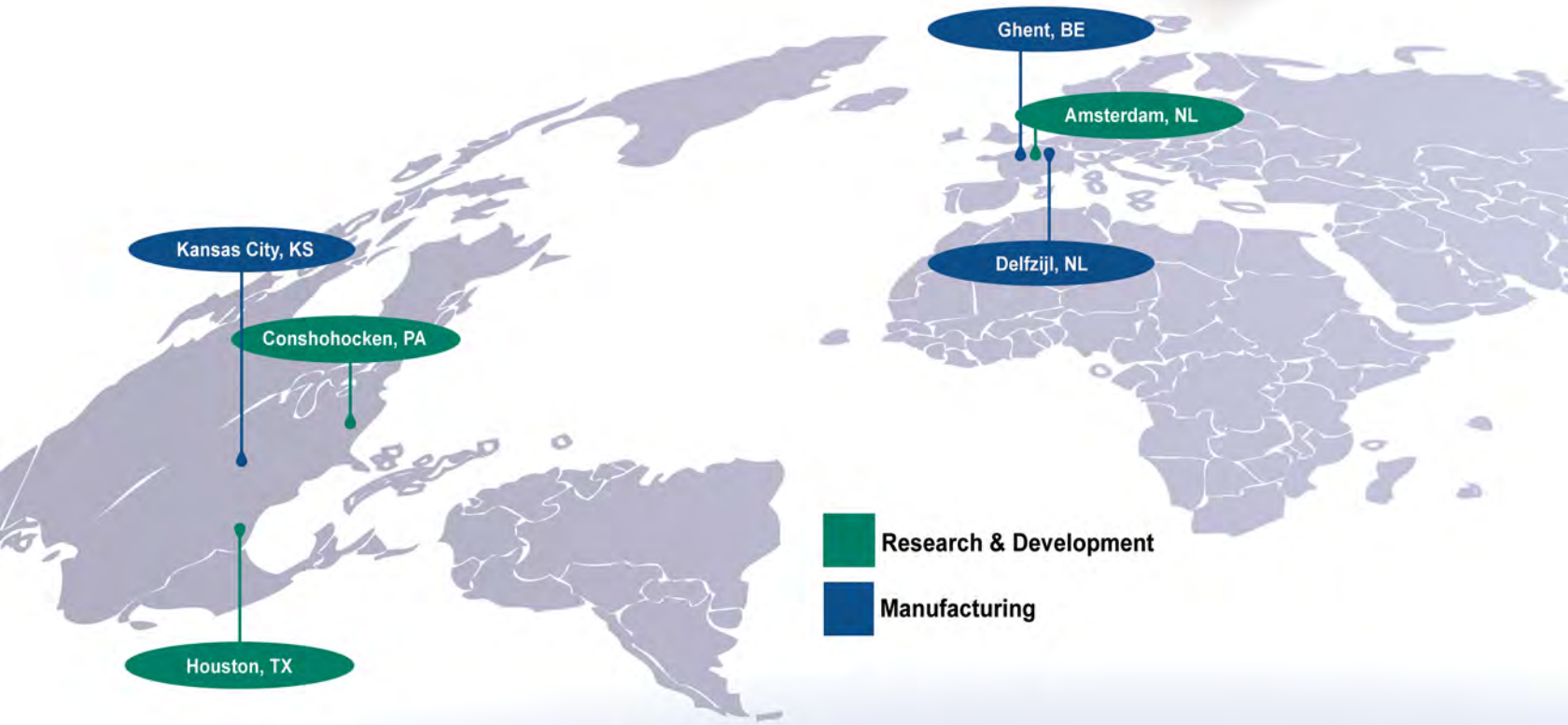
Since its inception in 1988, Zeolyst International has emerged as a global leader in the disciplines of zeolite powders, catalysts and adsorbents. Recognized for our wide portfolio, the quality of our zeolites and capabilities to tailor our products to customers' needs, we are proud to serve our customers in a large variety of applications across the refining, chemicals, emission control and many more industries.

Our long experience in development and manufacturing of zeolites and zeolite-containing catalysts is the result of continuous investments in research and advanced production facilities.

As a global company, and with our experienced sales team in Americas, EMEA and in Asia, we are ready to support your needs across the world.

Zeolyst International manufactures zeolite powder at two facilities: Kansas City, Kansas, USA, and Delfzijl, Netherlands. Both are world-class plants capable of manufacturing standard zeolites as well as custom products for specific customer applications.

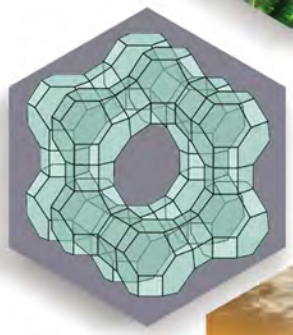
Extruded products are manufactured at a specialty extrusion plant in Ghent, Belgium. The plant contains specialized process equipment designed to produce catalysts and extrudates with preferred physical and chemical properties.



ZEOLITE PROPERTIES

As the understanding of zeolite chemistry expands, the uses of zeolites expand as well. Variations in silica-to-alumina ratios, unit cell sizes, pore sizes, surface area, cations, and incorporated metals produce a wide spectrum of adsorbent and catalytic properties that are useful in many new application areas.

Zeolyst international has the experience and capabilities to tailor properties to your specific application needs. Our highly experienced technical team is looking forward to discussing your needs.



OUR APPLICATIONS

A wide variety of commercial zeolite products and our capability to customize zeolites for specific applications give you the flexibility to optimize your process for maximum success.

Refining: Our zeolites are widely used as catalysts in the refining of crude oil into finished petroleum products. Due to their high selectivity, zeolite catalysts are often the most efficient and cost-effective method for a number of refinery conversions. The properties of zeolites uniquely suit them for tailoring to specific applications.

Petrochemicals: Zeolites are increasingly used in the production of petrochemicals, often replacing environmentally impacting catalysts. Zeolite catalysts typically yield fewer impurities, have higher capacity, give greater unit efficiency, and afford higher selectivity.

Emission Control: The unique properties and selectivity of zeolites can provide effective solutions for environmental pollution by minimizing the production of pollutants and by secondary treatment of the effluents produced. Zeolites have proven to be highly efficient in the reduction of atmospheric NOx and VOCs (volatile Organic Compounds) through catalysis and adsorption.

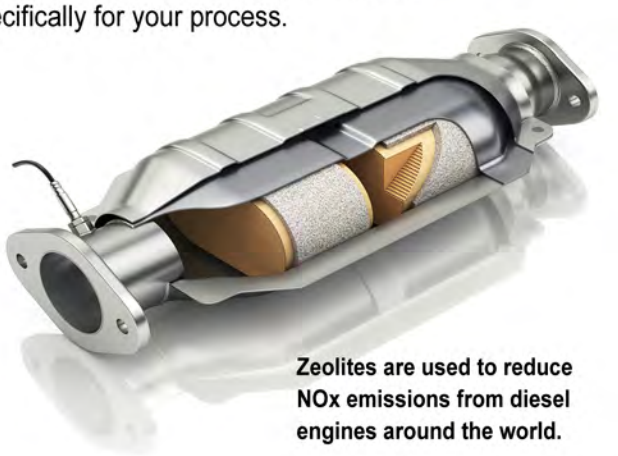
Custom applications: Zeolyst International will collaborate with you to customize products for your applications. With promising developments in catalysis and adsorption to support a sustainable world through green chemistries, energy transition, lower carbon footprint, or circular economy (to name a few), our New Business Development team is ready to support your technology commercialization.

OUR BUSINESS MODEL

Over more than 30 years, Zeolyst International has developed and produced custom zeolite products for a variety of companies in many application areas. In developing custom zeolites, we have moved customer laboratory-scale material to commercial production, and we have tailored standard commercial materials for customer-specific processes.

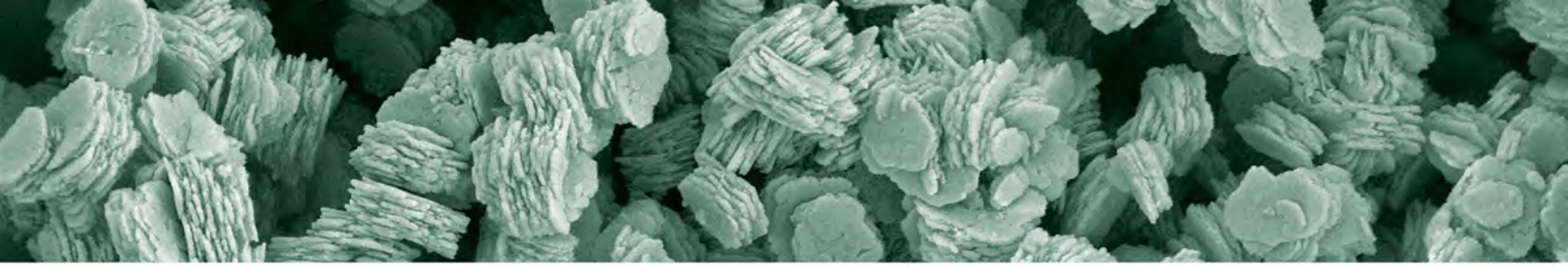
If you have developed or licensed a particular zeolite material or catalyst, our technical experts can assist scaling-up and manufacturing your product.

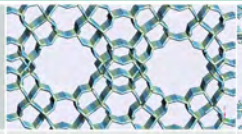
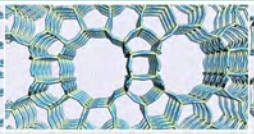
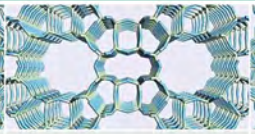
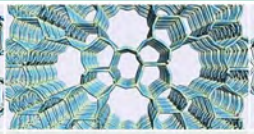
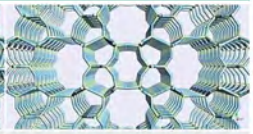
If you are investigating a completely new application for zeolites, we can recommend starting materials and possible modifications, provide test quantities, perform detailed analyses of critical zeolite properties, and manufacture the new product specifically for your process.



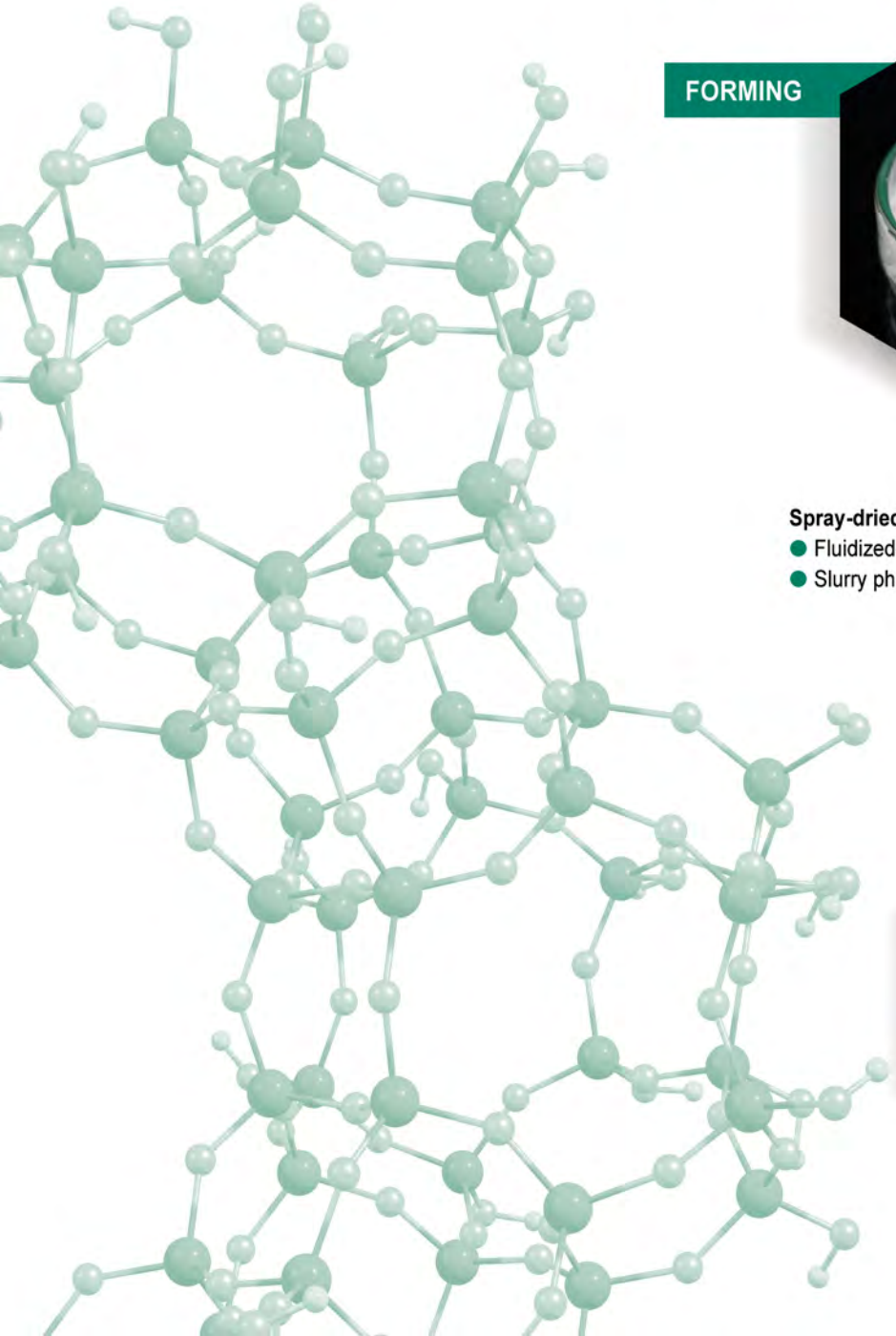
Zeolites are used to reduce NOx emissions from diesel engines around the world.

Our extensive research work for the development of zeolites is key to the refining and petrochemical industry.



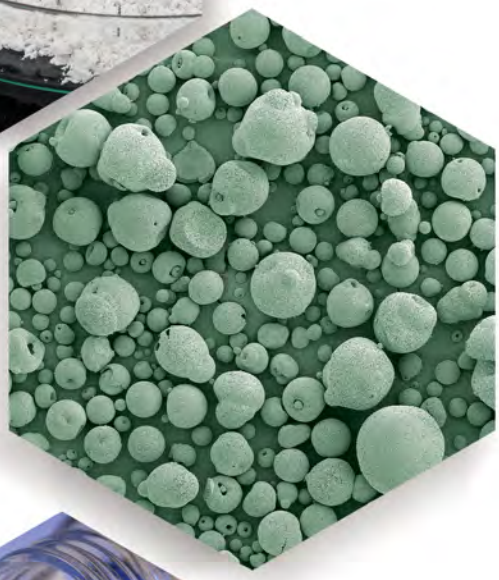
	FAU - Y	BEA - Beta	MOR - Mordenite	MFI - ZSM-5	FER - Ferrierite
Zeolite Structure					
Pore Type	Large	Large	Large / Small	Medium	Medium / Small
Interconnect Pores	Yes	Yes	No	Yes	No
Silica/Alumina Ratio	5-140	22-600	10-60	25-1000	17-60

Contact us to discuss your needs and other zeolites we have available



FORMING

Powder:
- Slurry phase reactions
- Monolith washcoats for automotive catalysts



Spray-dried catalysts:
- Fluidized-bed reactors
- Slurry phase reaction

Extrudates with various shapes and sizes:
- Fixed-bed reactors
- Vapor and liquid phase

OUR CERTIFICATIONS

2015

Responsible Care®
Good Chemistry at Work

14001 Certified

REACH Compliant

We have built our business through a commitment to help our customers succeed in their own businesses. We apply a "Continuous Quality Improvement" philosophy to meet and exceed all customer expectations and to ensure delivery of superior products accompanied by a high level of technical support.

At Zeolyst International, quality assurance is a key element in our customer satisfaction program. Our production plants are all ISO 9001 certified. Our quality improvement practices optimize all facets of zeolite and catalysts production, from bench scale to bulk scale.

We also support the American Chemistry Council's Responsible Care® program, committing to the responsible management of chemicals. Protection of health, safety, and the environment is one of our foremost concerns.

.

www.zeolyst.com

280 Cedar Grove Rd,
Conshohocken, PA 19428

The technical information and suggestions for use and applications presented herein represent the best information available to us and are believed to be reliable. They should not, however, be construed as controlling suggestions. Zeolyst International makes no warranties, either expressed or implied, with respect to our materials, including the warranties of merchantability or fitness for any particular purpose. We urge that users of our materials conduct confirmatory tests to determine final suitability for their specific end uses.

® 2021 Zeolyst International. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form,or by any means electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher and copyright holder.