

# CAS

Who we are and what we can do for you

Ian MacGregor, Principal, Business Development

© 2026 American Chemical Society. All rights reserved.

# CAS

A division of the  
American Chemical Society



# About CAS

## Who we are and what we do

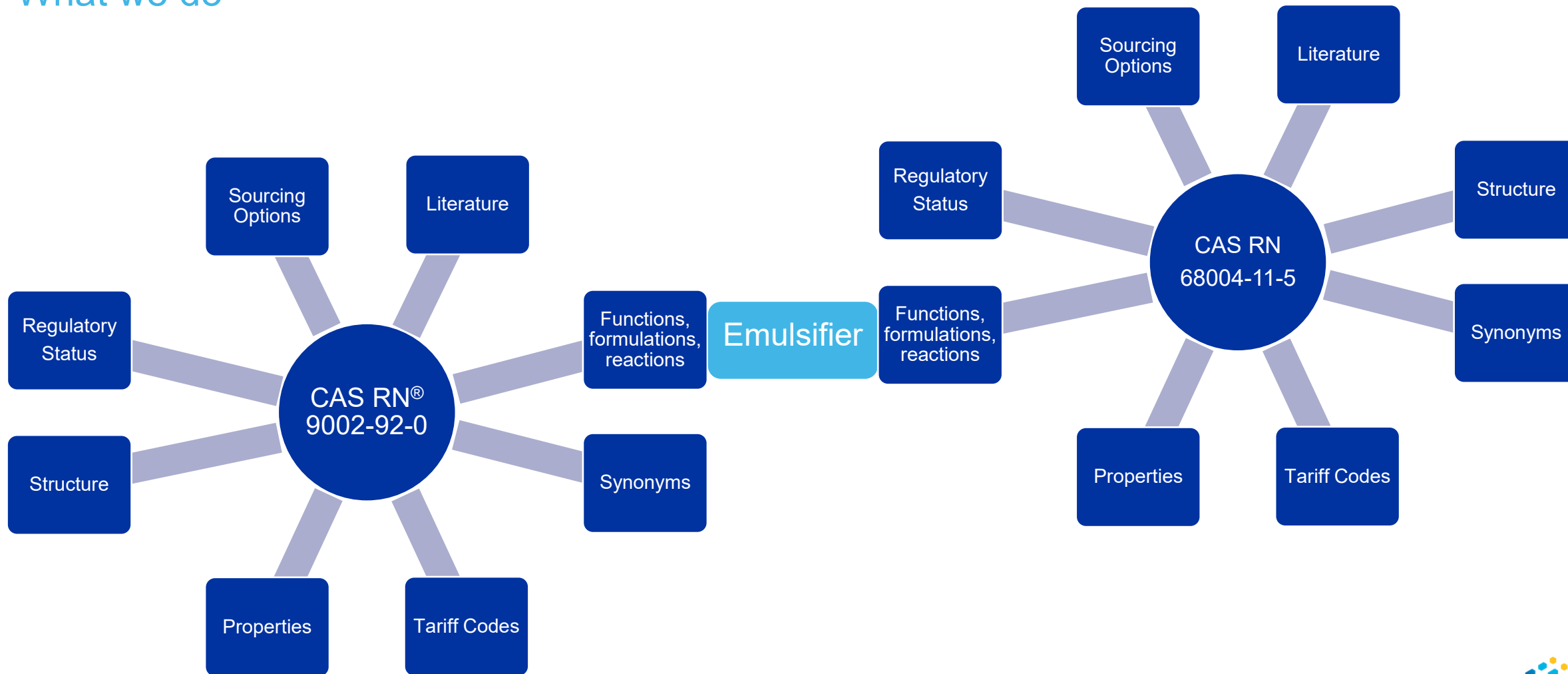
- Founded in 1907; a division of the American Chemical Society
- Maintain CAS REGISTRY<sup>®</sup>, the authoritative source for substance information
- Support dozens of federal agencies and thousands of world-class universities and commercial companies

## CAS data:

- CAS Registry Numbers<sup>®</sup>
- Chemical structures and reactions
- Physicochemical properties
- Spectra
- Analytical methods
- Toxicological and regulatory data (the GHS)
- Commercial sources
- Global patents and published research

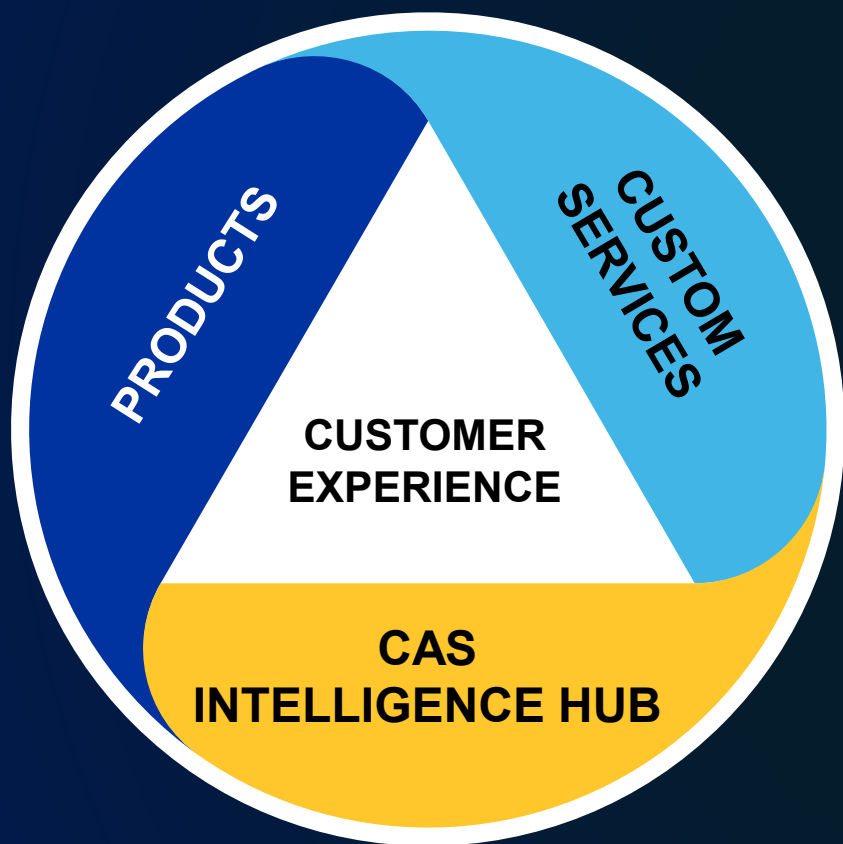
# Connecting science to overcome challenges

What we do



# CAS delivers value in three ways

Product, services, and platform as a service



## PRODUCTS

Best-in-class scientific solutions throughout the innovation journey that accelerate breakthroughs and get discoveries to market faster



## CUSTOM SERVICES

Customized solutions leveraging content, technology, and knowledge management expertise to drive innovation and solve unique R&D and business challenges



## CAS INTELLIGENCE HUB<sup>SM</sup>

An integrated solution that transforms fragmented scientific data into searchable, scalable, AI-ready insights

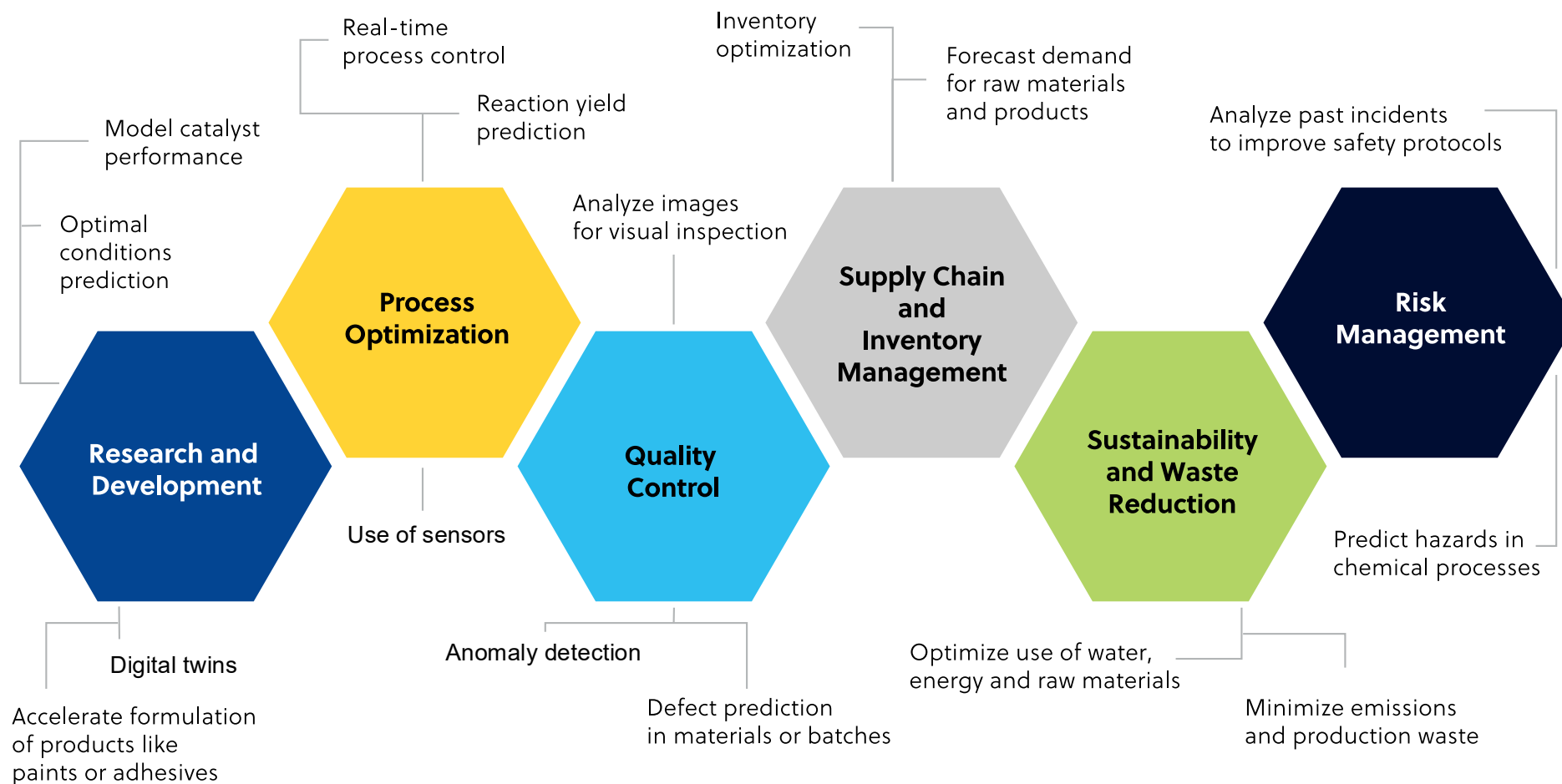
# Reimagining scientific discovery through advancing technology/AI and intelligent systems

Enhancing operations, advancing our solutions, and enabling our customers' AI efforts

CAS internal AI integration  Enabling customers' AI success



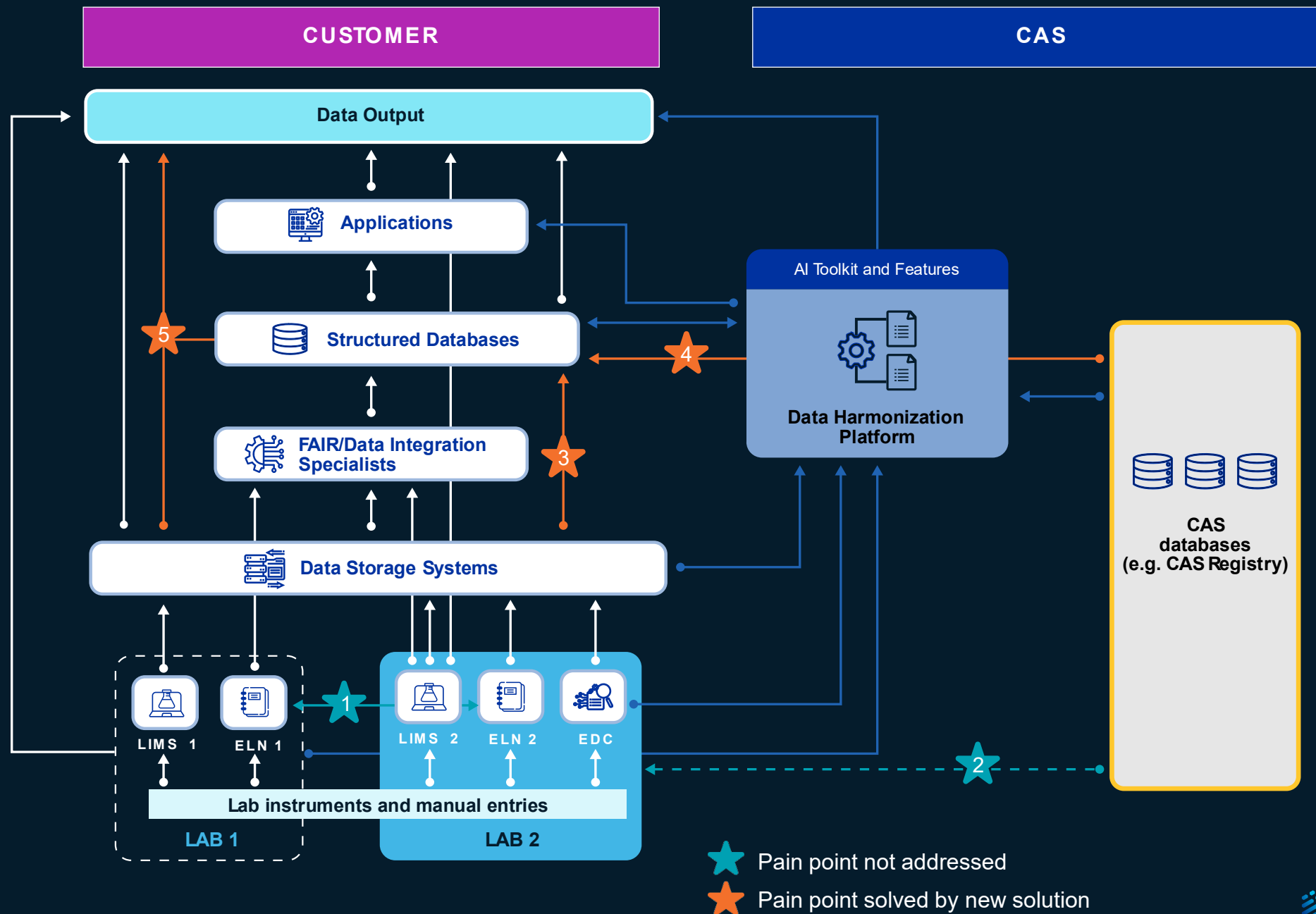
# Emerging AI applications touch every phase of innovation



# CAS Intelligence Hub


Solves key pain points:


Linking external data, structuring internal data, and bridging systems




# CAS Custom Services<sup>SM</sup>


Transforming data into actionable insights that drive innovation

 <b>Content Management: Internal Data Discovery</b>
Digitization
Data extraction
Data normalization
Taxonomies
System search

 <b>Knowledge Management: Data Design</b>
Substance registry
Domain modeling and governance
Structure normalization
Data migration
Content system audit
External data connection

 <b>Prediction: AI</b>
Training data sets (algorithm development)
Custom AI data curation
AI data support
Retrieval-augmented generation (RAG) solutions
AI-based research area assessments

 <b>Data-Enabled Risk Management</b>
Responsible synthesis design
Substance supply chain analysis
Substance regulatory status and safety
Toxicology literature review
Commercial sourcing
Alternatives analysis

 <b>Search</b>
IP custom search <ul style="list-style-type: none"><li>– Landscape</li><li>– State of the art</li><li>– Freedom to operate</li><li>– Novelty</li><li>– Pre-patent examination</li><li>– Search strategy assessment</li></ul>

# Increase asset utilization

Identify new product candidates for under-utilized manufacturing assets

## OBJECTIVES

- **Increase asset utilization**
- Identify potential products for an under-utilized chemical reactor
- Consider existing raw materials only

## APPROACH

1. Identify raw materials and process constraints
2. Identify reaction candidates
3. Identify product candidates

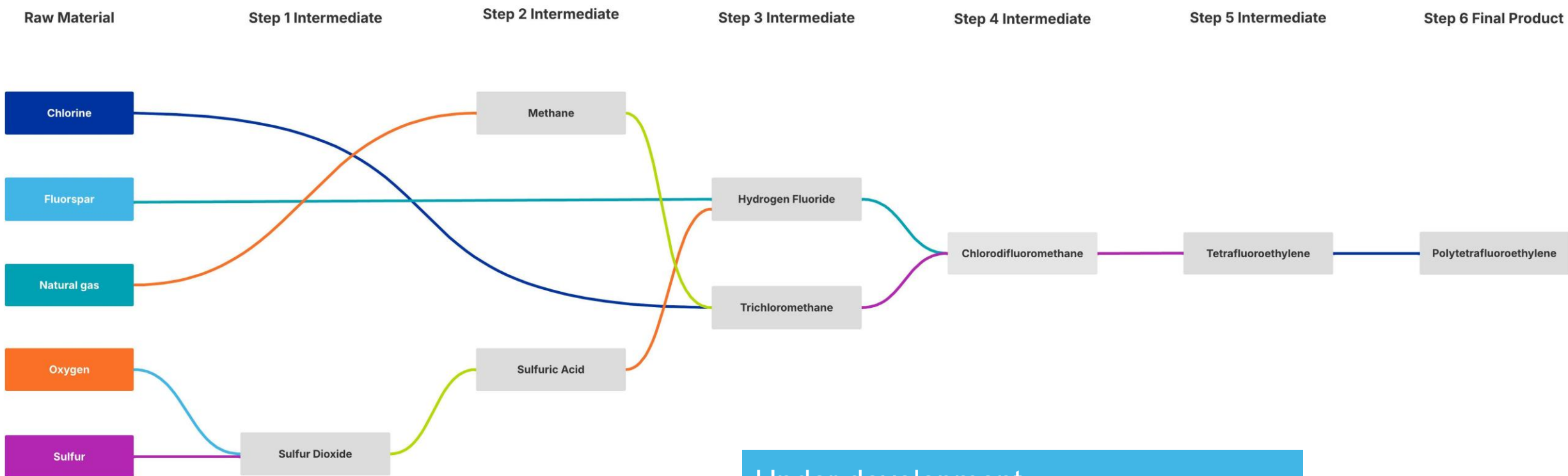
## OUTCOMES

- ✓ Identified 201 new product candidates
- ✓ Provided industry application insight
- ✓ Asset utilization increased

# Supply chain intelligence

Knowing your chemical supply chain reveals risks and enables proactive decision-making

Outcome: Mapped upstream 95% of a consumer products company's 4.2M tons of feedstocks

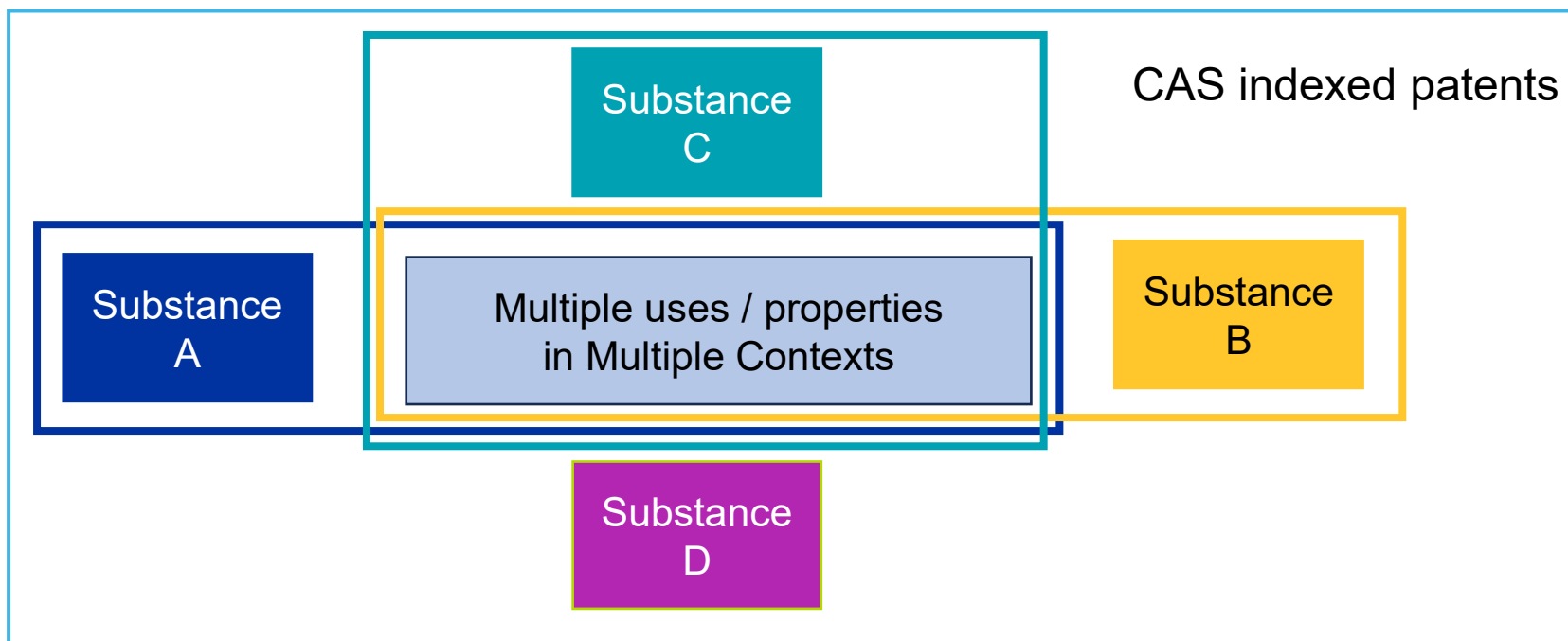


Under development:  
Harmonized Tariff Schedule (HTS) ↔  
CAS Registry Number lookup tool

# Alternatives analysis

Overcoming supply chain constraints

Outcome: Identified ~100 alternative substances for one PFAS found in hundreds of defense-related products



Proximity network analysis to identify most relevant candidate substitutes

- Has the most of the same or closely related properties (impact modifier vs. toughening agent)
- Correlate on needed properties over known use

# More success stories

## Logistics Support

Streamlined regulatory compliance activities for Rinchem

## Waste repurposing

Helped ICL discover profitable uses for waste materials

## Chemical Inventory Management

Identified redundant supplies for Servier to free up storage space and save money

## IP Monitoring and Evaluation

Built custom patent monitoring software tool powered by most current content

**Transform data into a strategic resource to reduce risk, increase efficiency, and make money.**

# Thank you

**Ian MacGregor**

Principal, Business Development

614.254.4376

[imacgregor@cas.org](mailto:imacgregor@cas.org)

## Visit us at Booth 109

Scan for more  
information

