Chris Clark
Chief Executive
# JM Executive Board

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Chris Clark</td>
<td>Chief Executive</td>
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<tr>
<td>John Sheldrick</td>
<td>Group Finance Director</td>
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<tr>
<td>Neil Carson</td>
<td>Executive Director, Catalysts and Precious Metals</td>
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<tr>
<td>David Morgan</td>
<td>Executive Director, Corporate Development, Central Research and Colours &amp; Coatings</td>
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<tr>
<td>Dr Pelham Hawker</td>
<td>Executive Director, ECT</td>
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<tr>
<td>Larry Pentz</td>
<td>Executive Director, PCT</td>
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# Other Senior Management

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Dr Martin Durney</td>
<td>Vice President &amp; General Manager, PCT North America and Asia</td>
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<tr>
<td>Roger Kilburn</td>
<td>Vice President, Polymers, Chemicals and Edible Oils</td>
</tr>
<tr>
<td>Dr David Prest</td>
<td>Technical Director PCT</td>
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<tr>
<td>Neil Whitley</td>
<td>Vice President, Ammonia, Methanol, Oil and Gas</td>
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<tr>
<td>Ian Godwin</td>
<td>Investor Relations</td>
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Programme

11.00 Welcome and trading update (Chris Clark)
11.15 The Catalyst Market and Catalysts Division (Neil Carson)
11.30 Process Catalysts & Technologies (Larry Pentz)
12.15 Chiral Catalysts (Martin Durney)
12.30 Gas to Liquids (Neil Whitley)
12.45 Q&A
13.00 Buffet lunch
13.30 Plant tour (David Prest)
14.50 Visit wrap up
15.00 Depart for station
Current Trading

• Trading in line with expectations
• Results restated for FRS 17
• First quarter earnings ahead
• Good growth in operating profit
• Interest charge up (includes pension impact)
• Confident of growth in half year earnings (before exceptional items and goodwill amortisation)
Divisions Year To Date

Catalysts strongly ahead
PCT benefits from contribution from former Synetix businesses
but refining adversely affected by Pd / Rh prices
ECT ahead with good demand in Asia

Precious Metals below last year with subdued trading

Strong Euro benefiting Colours on exchange translation,
but adversely affecting Tile customers’ demand

Pharmaceutical Materials comfortably ahead. Good progress on morphine / codeine production in US
Analysts Visit

24 September 2003
Chilton Site, UK
Neil Carson
Executive Director, Catalysts and Precious Metals
The Catalyst Market
Catalyst Industry

- £6.6bn per year industry
- 4 broad market segments

**Market segments £bn**

- Chemical: 1.5
- Petroleum: 1.8
- Environment: 1.9
- Polymers: 1.4

**Regional Breakdown %**

- N. America: 37%
- W. Europe: 27%
- Japan: 14%
- Other: 22%

Source: The Catalyst Group

Source: SRI consulting
Catalyst Industry

• Growth expected at 4.5% p.a.
• Variation across segments
  – Chemical 4% p.a.
  – Petroleum Refinery 2% p.a.
  – Environment 8% p.a.
  – Polymerisation 6% p.a.

Source: The Catalyst Group
Catalyst Industry

Expected Industry Segment Growth

£bn

2001 2004 2007

Chemicals  Petroleum  Environmental  Polymers

Source: The Catalyst Group
Catalyst Industry

• Consolidation and decaptivation to continue
• Top 9 players serve 60% of the market
Johnson Matthey Catalysts

• Focused on the Environmental and Chemical processing segments
• Identified value adding markets in all four Catalyst segments

<table>
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<th>Market segments</th>
<th>£bn</th>
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<tr>
<td>Chemical</td>
<td>1.9</td>
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<tr>
<td>Polymers</td>
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Johnson Matthey Catalysts

**Environmental Catalysts and Technologies (ECT)**
- Autocat
- Diesel
- Off Road
- Small engine
- Stationary Source

**Fuel Cells**

**Process Catalysts and Technologies (PCT)**
- Syngas
- Refinery & Gas Purification
- Edible Oil & Oleochemicals
- Polymers, Inks & Coatings
- Speciality Chemicals
- Pharma/Fine Chemicals
- GTL
- PGM Refining & Products
- Research Chemicals
- Tracerco

Sales

- 64%
- 36%
Larry Pentz

Executive Director, Process Catalysts and Technologies
Process Catalysts & Technologies

- A diverse business
- Serving seven markets within the Catalyst industry
- Three additional businesses complement our catalyst focus
- Strong technical and application capabilities
Process Catalysts & Technologies (PCT)

**Process Catalysts**
- Syngas
- Refinery & Gas Purification
- Edible Oil & Oleochemicals
- Polymers, Inks & Coatings
- Speciality Chemicals
- Pharma/Fine Chemicals
- GTL

**Technologies**
- PGM Refining & Products
- Research Chemicals
- Tracerco

Blue denotes historical JM markets
PCT – Synetix acquisition status

• Successful transition and integration process
• A fully integrated business within PCT
• Delivering anticipated results and synergies
  – Complete decoupling from ICI systems and onto JM business processes
  – Integrated organisational structure focused on global markets
  – Rebranding of the Synetix name to JM Catalysts
  – Top line opportunities progressing
  – Investment to address strategic opportunities
PCT - GROWTH OPPORTUNITY

• Develop identified catalyst markets
  – GTL
  – Pharma/Fine Chemicals
  – Chemicals Processing
  – Other niche applications
• Explore other catalyst market opportunities
• Exploit the breadth of catalysis expertise available to us
• Maximise the value potential of Research Chemicals, Tracerco, and PGM businesses
PCT – Syngas Markets

• Catalysts, process technology, other related products and services
• Converting natural gas or naptha to:
  - ammonia
  - methanol or
  - hydrogen
Ammonia

Market size & growth

• £700m installed catalyst
• £125m market
• 2% estimated growth
• Global #2

Competitors

Haldor Topsoe, Sud Chemie, Local producers

• Established global market
• Well positioned in regions
• We know our customers
• Unique operational experience
Methanol

Market size & growth
• £30m market
• 3% estimated growth
• Global #1

Competitors
Haldor Topsoe, Sud Chemie, Mitsubishi Gas Chemical

• Global market
• Global reputation
• Strong position in all regions
• Process license development
• Unique operational experience
Hydrogen

Market size & growth

• £70m market
• 4-7% estimated growth
• Global #2

Competitors

Haldor Topsoe, Sud Chemie, Local producers

• Growing market
• Strong position in key sectors
• Targeting further growth
• Leveraging services
PCT – Refinery & Gas Processing Markets

• The sale of absorbents and services
• Removal of trace impurities from gaseous streams in petroleum refining or gas processing
Refinery & Gas Processing Markets

Market size & growth

- > £100m market
- Difficult market to quantify
- Niche player
- Strong position in fixed bed polishing market
- 3-5% estimated growth

Competitors

Sud Chemie, Axens, Alumina suppliers

- Recognised premium brand – PURASPEC™
- Adds value to downstream process
- Increasing environmental awareness and legislation
- Opportunity for new applications
PCT – Edible Oil & Oleochemical Markets

• Catalysts used in processing of fats and oils
• Set unique properties in their end use applications as either edible oils or oleochemicals
Edible Oils

Market size & growth

- £29m market
- 1-2% estimated growth
- Global # 1

Competitors

Engelhard, Local producers

- Global customer reach
- Consolidated supplier base
- Strong application support
- Significant entry barrier
- Opportunity to link PGM catalyst
Oleochemicals

Market size & growth

- £42m market
- 1-2% estimated growth
- Global #2

Competitors

Engelhard, Sud Chemie, Cognis, CRI, Local producers

- Global market
- Consolidated supply base
- Shift from Europe to Asia
- Strong relationship with 2 major players
- Wide offering of products
Oleochemicals

Natural oils & fats → Splitting → Hydrogenation → Separation Distillation Fractionation

Stearine → Oleine

Polymerization → Polymerized fatty acids

Esterification → Esters

Amidation → Amides

Amination → Amines

Glycerine → Glycerine refining
PCT – Polymers, Inks & Coatings Markets

- Catalysts, promoters and additives
- Based on our organometallic technology
- Consumed in polymerisation reactions such as plasticisers and acrylates
- Used as adhesion promoters to allow inks to stick to flexible packaging
- Additives to paints and other products to modify flow characteristics
Polymers

Market size & growth

• £20m market
• 4% estimated growth
• Global #1

Competitors

DuPont, Nippon Soda

• Environmentally friendly alternative

• Platform for new growth:
  – Polyester
  – Polyurethanes
Inks

Market size & growth
- £13m market
- 3% estimated growth
- Global #1

Competitors
DuPont

- Strong industry focus
- Patent protected sales
- Strong customer relationships
PCT – Speciality & Fine Chemicals Markets

• Catalysts sold into the large, diverse chemical processing market place
• Speciality / fine chemicals very attractive segment
• Many technologies (oxidation, hydrogenation, etc.) and many applications
• Opportunities to add value by catalyst improvements
• Decaptivation of existing producers
Speciality & Fine Chemicals

Market size & growth
- £476m market
- 5% estimated growth
- #1 / #2 in our niches

Competitors
Sud Chemie, Axens, Engelhard, Degussa

- Strong position in oxo alcohol
- Strength in niche applications (fluorochems, silicones, solvents)
- Platform for new opportunities
- Broadest range of technologies for chiral market
Chemicals

Oxo alcohol process

- Synetix oxo process license
- Support package
- Syngas catalysis
- Rh hydroformylation

- Rhodium recovery license
- Hydrogenation catalysts range
- Catalysts for polishing

Blue denotes historical JM
PCT – PGM Refining & Products Markets

- Johnson Matthey’s traditional precious metal businesses
- Providing a service to recover PGM’s from spent or scrap materials, including PGM catalysts
- Manufacturing of precious metal containing chemical products
PGM Refining & Products Markets

Market size & growth

• Secondary refining – about £160m
• A large captive PGM product market
• Global #1 secondary refining

Competitors

Engelhard, Hereaus, Umicore, Tanaka KK, others

• Recognised world wide reputation
• Benchmark analytical and process technology capability
• Supports catalyst business
• Other product applications include electronics, photography, plating, etc
PCT - Research Chemicals

- Distributor of inorganic and organic compounds for use in research laboratories
- Supplies small to pilot quantities for scale up and small manufacturing
- Offers a global distribution network for R&D
Research Chemicals

Market size & growth

• £300m Organics market
• £50m Inorganics market
• Global #2 for Inorganics

Competitors

Aldrich, Fischer, Lancaster, Strem, others

• High margin, growth business
• Opportunities for market share in Organics
• A number of small players allow for consolidation
• Asian R&D shift opens new region
PCT - TRACERCO™

• Contract service provider to upstream oil, petrochemical, and chemical facilities
• Supplier of specialist measurement devices for industrial application
• A taggant system offering for the effective tracing of hydrocarbon materials
TRACERCO™

• Maximising oil production in difficult areas of the world
• Expertise in the application of source materials for difficult measurements
• 50 years of successful customer service in UK
• Growth opportunity as proactive, online process equipment evaluation develops
PCT - Conclusion

- A diverse, good margin, global business
- Based on science and technology
- Highly customer focused
- Expanded capability
- Strategy for growth