

# **Optical Emission Spectroscopy Market by Offering (Equipment, Services) Form Factor, Excitation Source Type (Arc/Spark OES, ICP-OES), Detector Type, Vertical (Automotive, Scrap & Recycling, Aerospace & Defense), and Geography - Global Forecast to 2023**

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## **Abstracts**

“Optical emission spectroscopy market to grow at CAGR of 6.36% during 2018–2023”

The optical emission spectroscopy (OES) market is estimated to grow from USD 582.2 million in 2018 to USD 792.4 million by 2023, at a CAGR of 6.36% from 2018 to 2023. The factors that drive the growth of the optical emission spectroscopy market include enforcement of stringent government safety regulations and quality control requirements across various sectors, and technological enhancements and increased functionalities. Rising demand for multielement analysis technologies from end-user industries, growing preference to outsource analytical requirements to third-party service providers, and increasing demand from metal and scrap recycling industry are offering new growth opportunities for the growth of the OES market. However, high cost associated with the elemental analysis via OES equipment is a factor restraining the growth of this market. One of the major challenges for the studied market is lack of skilled personnel for handling OES equipment.

“Optical emission spectroscopy equipment to hold larger market share in 2018”

OES equipment is expected to hold the largest share of the global optical emission spectroscopy market in 2018. Growing use of portable OES analyzers in metal producing and processing industries, such as metals and heavy machinery, automotive, aerospace & defense, and scrap and recycling industries; and rising use of ICP-OES across food & beverages, chemicals, pharmaceutical, and environmental industries are

likely to increase the adoption of OES instruments. The market for services is expected to grow at a higher CAGR during the forecast period. Increasing involvement of third-party service providers such as SGS, Bureau Veritas, and Intertek is likely to drive the overall services market.

“ICP-OES market to grow at higher rate during forecast period”

Arc/spark OES equipment is expected to hold the largest share of the OES equipment market in 2018. However, the market for the inductively coupled plasma optical emission spectroscopy (ICP-OES) equipment is expected to grow at the highest CAGR during the forecast period. ICP-OES offers multielemental determination capabilities by using sequential or simultaneous optical systems (using PMTs or CCDs as detection units). ICP-OES are mainly used in a wide range of verticals, such as environmental labs, pharmaceuticals & life sciences, food & beverages, and oil & gas. Owing to the growing demand from the aforementioned industries, ongoing advancements to reduce operating costs (such as by reducing consumption of purge gas) and improvements in sensitivity and stability of the technology (such as by shifting from echelle type diffraction grating to Optimized Rowland Circle Alignment (ORCA) as in ICP-OES from Spectro by Ametek (US)), the market for ICP-OES is expected to exhibit a higher growth rate during the forecast period.

“APAC expected to hold major market share in 2018”

APAC is expected to hold the largest share of the global optical emission spectroscopy (OES) market in 2018. Continuous advancements in APAC, in terms of economic growth, infrastructural developments, and the automotive industry, are likely to boost the requirement of OES equipment in this region. APAC is a major market for various sectors such as consumer electronics, automobiles, and defense. This region has become a global focal point for large investments and business expansion opportunities. APAC experiences a steady growth in all sectors. In the automobile sector, as of 2016, this region accounted for more than 50% of the overall passenger car production. Strong demand from food & beverages, environmental, automotive, and aerospace & defense industries are expected to contribute to the growth of the OES market in North America. RoW has a strong base of industrial and process-based sectors, such as oil & gas, scrap recycling, and chemicals. Despite the lack of domestic manufacturers as well as high economic and political barriers in the countries in this region, the OES market is likely to witness growing demand from this region during the forecast period.

In the process of determining and verifying the market size for several segments and subsegments gathered through the secondary research, extensive primary interviews have been conducted with key industry experts in the optical emission spectroscopy market. The break-up of primary participants for the report has been shown below:

By Company Type: Tier 1 = 40%, Tier 2 = 35%, and Tier 3 = 25%

By Designation: C-level Executives = 20%, Directors = 35%, and Others = 45%

By Region: APAC = 45%, Europe = 32%, North America = 20%, and RoW = 3%

The report profiles the key players in the optical emission spectroscopy market, along with their ranking analysis. Thermo Fisher Scientific (US), Ametek (US), Bruker (US), Hitachi High Technologies Corporation (Japan), Shimadzu (Japan), Horiba (Japan), PerkinElmer (US), Agilent Technologies (US), Skyray Instrument (US), and Analytik Jena (Germany). SGS (Switzerland), Bureau Veritas (Japan), Intertek (UK), TUV SUD (Germany), and Element Materials Technology (UK) are the major players in the optical emission spectroscopy services market.

#### Research Coverage:

This research report categorizes the global optical emission spectroscopy market on the basis of offering, form factor, excitation source type, detector type, vertical, and geography. The report describes market dynamics that include key drivers, restraints, challenges, and opportunities for the optical emission spectroscopy market and forecasts the same till 2023.

The report would help leaders/new entrants in this market in the following ways:

1. This report segments the optical emission spectroscopy market comprehensively and provides the closest market size projection for all subsegments across different regions.
2. The report helps stakeholders understand the pulse of the market and provides them with the information on key drivers, restraints, challenges, and opportunities pertaining to the market.
3. This report would help stakeholders understand their competitors better and gain more insights to improve their position in the business. The competitive landscape section includes competitor ecosystem, product developments and launches, partnerships, and mergers and acquisitions.

## Contents

### 1 INTRODUCTION

- 1.1 OBJECTIVES OF THE STUDY
- 1.2 DEFINITION
- 1.3 STUDY SCOPE
  - 1.3.1 MARKETS COVERED
  - 1.3.2 YEARS CONSIDERED FOR THIS STUDY
- 1.4 CURRENCY
- 1.5 PACKAGE SIZE
- 1.6 STAKEHOLDERS

### 2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
  - 2.1.1 SECONDARY DATA
    - 2.1.1.1 Secondary sources
  - 2.1.2 PRIMARY DATA
    - 2.1.2.1 Key data from primary sources
    - 2.1.2.2 Key industry insights
    - 2.1.2.3 Breakdown of primaries
  - 2.1.3 SECONDARY AND PRIMARY RESEARCH
- 2.2 MARKET SIZE ESTIMATION
- 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION
- 2.4 MARKET SHARE ESTIMATION
- 2.5 ASSUMPTIONS & LIMITATIONS
  - 2.5.1 ASSUMPTIONS
  - 2.5.2 LIMITATIONS

### 3 EXECUTIVE SUMMARY

### 4 PREMIUM INSIGHTS

- 4.1 OPPORTUNITIES IN OPTICAL EMISSION SPECTROSCOPY (OES) MARKET
- 4.2 OPTICAL EMISSION SPECTROSCOPY MARKET, BY OFFERING, 2017 VS. 2023
- 4.3 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2015–2023
- 4.4 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY DETECTOR

TYPE, 2017 VS. 2023

4.5 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY EXCITATION SOURCE TYPE, 2017–2023

4.6 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET SNAPSHOT FOR INDUSTRIES & REGIONS

4.7 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY FORM FACTOR, 2017 VS. 2023

4.8 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY GEOGRAPHY, 2017–2023

## **5 MARKET OVERVIEW**

### **5.1 MARKET DYNAMICS**

#### **5.1.1 DRIVERS**

5.1.1.1 Stringent safety regulations by governments and quality control requirements

5.1.1.2 Technological enhancements and increased functionalities

#### **5.1.2 RESTRAINTS**

5.1.2.1 High initial cost associated with OES equipment

#### **5.1.3 OPPORTUNITIES**

5.1.3.1 Growing requirement of multielement analysis from environmental, pharmaceutical and life sciences, scrap and recycling, and food & beverage industries

5.1.3.2 Growing preference to outsource analytical requirements to third-party service providers

5.1.3.3 Demand from metals and scrap recycling industry

#### **5.1.4 CHALLENGES**

5.1.4.1 Lack of skilled personnel for handling OES equipment

## **6 OPTICAL EMISSION SPECTROSCOPY (OES) EQUIPMENT MARKET, BY OFFERING**

### **6.1 INTRODUCTION**

### **6.2 EQUIPMENT**

### **6.3 SERVICES**

## **7 OPTICAL EMISSION SPECTROSCOPY (OES) EQUIPMENT MARKET, BY FORM FACTOR**

### **7.1 INTRODUCTION**

### **7.2 PORTable**

### 7.3 BENCHTOP

## **8 OPTICAL EMISSION SPECTROSCOPY (OES) EQUIPMENT MARKET, BY EXCITATION SOURCE TYPE**

### 8.1 INTRODUCTION

### 8.2 INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROSCOPY

### 8.3 ARC/SPARK OPTICAL EMISSION SPECTROSCOPY

## **9 OPTICAL EMISSION SPECTROSCOPY (OES) EQUIPMENT MARKET, BY DETECTOR TYPE**

### 9.1 INTRODUCTION

### 9.2 SOLID-STATE DETECTOR

### 9.3 PHOTOMULTIPLIER TUBE

### 9.4 HYBRID

## **10 OPTICAL EMISSION SPECTROSCOPY (OES) EQUIPMENT MARKET, BY VERTICAL**

### 10.1 INTRODUCTION

### 10.2 AUTOMOTIVE

### 10.3 SCRAP AND RECYCLING

### 10.4 AEROSPACE & DEFENSE

### 10.5 METALS AND HEAVY MACHINERY

### 10.6 POWER GENERATION

### 10.7 FOOD & BEVERAGES

### 10.8 ENVIRONMENTAL

### 10.9 INFRASTRUCTURE

### 10.10 PHARMACEUTICALS AND LIFE SCIENCES

### 10.11 CHEMICALS

### 10.12 OIL & GAS

### 10.13 OTHERS

## **11 GEOGRAPHIC ANALYSIS**

### 11.1 INTRODUCTION

### 11.2 NORTH AMERICA

#### 11.2.1 US

- 11.2.2 CANADA
- 11.2.3 MEXICO
- 11.3 EUROPE
  - 11.3.1 GERMANY
  - 11.3.2 UK
  - 11.3.3 FRANCE
  - 11.3.4 REST OF EUROPE
- 11.4 APAC
  - 11.4.1 CHINA
  - 11.4.2 INDIA
  - 11.4.3 JAPAN
  - 11.4.4 REST OF APAC
- 11.5 ROW
  - 11.5.1 MIDDLE EAST & AFRICA
  - 11.5.2 SOUTH AMERICA

## **12 COMPETITIVE LANDSCAPE**

- 12.1 INTRODUCTION
- 12.2 KEY PLAYERS OF OPTICAL EMISSION SPECTROSCOPY MARKET
- 12.3 COMPETITIVE SITUATIONS & TRENDS
  - 12.3.1 PRODUCT LAUNCHES & DEVELOPMENTS
  - 12.3.2 MERGERS & ACQUISITIONS
  - 12.3.3 EXPANSIONS
  - 12.3.4 AGREEMENTS, PARTNERSHIPS, & COLLABORATIONS
- 12.4 LIST OF OTHER OPTICAL EMISSION SPECTROSCOPY EQUIPMENT PROVIDERS

## **13 COMPANY PROFILES**

### **13.1 EQUIPMENT PROVIDER**

(Business overview, Products offered, Recent developments, MNM view, SWOT analysis)\*

- 13.1.1 THERMO FISHER SCIENTIFIC
- 13.1.2 BRUKER
- 13.1.3 HITACHI HIGH-TECHNOLOGIES CORPORATION
- 13.1.4 AMETEK

- 13.1.5 SHIMADZU
- 13.1.6 HORIBA
- 13.1.7 PERKINELMER
- 13.1.8 AGILENT TECHNOLOGIES
- 13.1.9 SKYRAY INSTRUMENT
- 13.1.10 ANALYTIK JENA FOR ENDRESS+HAUSER

\*Business overview, Products offered, Recent developments, MNM view, SWOT analysis might not be captured in case of unlisted companies.

## 13.2 OTHER KEY COMPANIES

- 13.2.1 FOCUSED PHOTONICS (HANGZHOU)
- 13.2.2 SPECTRO SCIENTIFIC INC.
- 13.2.3 GBC SCIENTIFIC EQUIPMENT PTY LTD
- 13.2.4 TELEDYNE LEEMAN LABS
- 13.2.5 GNR ANALYTICAL INSTRUMENTS GROUP

## 13.3 SERVICE PROVIDER

(Business overview, Products offered, Recent developments, MNM view, SWOT analysis)\*

- 13.3.1 SGS
- 13.3.2 BUREAU VERITAS
- 13.3.3 INTERTEK
- 13.3.4 TUV SUD
- 13.3.5 ELEMENT MATERIALS TECHNOLOGY
- 13.3.6 TUV RHEINLAND

\*Business overview, Products offered, Recent developments, MNM view, SWOT analysis might not be captured in case of unlisted companies.

## 14 APPENDIX

- 14.1 INSIGHTS OF INDUSTRY EXPERTS
- 14.2 DISCUSSION GUIDE
- 14.3 KNOWLEDGE STORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL
- 14.4 INTRODUCING RT: REAL-TIME MARKET INTELLIGENCE
- 14.5 AVAILABLE CUSTOMIZATIONS
- 14.6 RELATED REPORTS



## 14.7 AUTHOR DETAILS

## List Of Tables

### LIST OF TABLES

Table 1 OPTICAL EMISSION SPECTROSCOPY MARKET, BY OFFERING, 2015–2023 (USD MILLION)

Table 2 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY FORM FACTOR, 2015–2023 (USD MILLION)

Table 3 PORTABLE OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 4 BENCHTOP OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 5 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 6 INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2015–2023 (USD MILLION)

Table 7 INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 8 ARC/SPARK OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2015–2023 (USD MILLION)

Table 9 ARC/SPARK OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 10 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 11 SOLID-STATE DETECTOR OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2015–2023 (USD MILLION)

Table 12 SOLID-STATE DETECTOR OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 13 PHOTOMULTIPLIER TUBE OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2015–2023 (USD MILLION)

Table 14 PHOTOMULTIPLIER TUBE OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 15 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2015–2023 (USD MILLION)

Table 16 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR AUTOMOTIVE, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 17 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR AUTOMOTIVE, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 18 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR

SCRAP & RECYCLING, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 19 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
SCRAP & RECYCLING, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 20 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
AEROSPACE & DEFENSE, BY EXCITATION SOURCE TYPE, 2015–2023 (USD  
MILLION)

Table 21 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
AEROSPACE & DEFENSE, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 22 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
METALS & HEAVY MACHINERY, BY EXCITATION SOURCE, 2015–2023 (USD  
MILLION)

Table 23 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
METALS & HEAVY MACHINERY, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 24 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
POWER GENERATION, BY EXCITATION SOURCE TYPE, 2015–2023 (USD  
MILLION)

Table 25 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
POWER GENERATION, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 26 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR FOOD  
& BEVERAGES, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 27 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR FOOD  
& BEVERAGES, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 28 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
ENVIRONMENTAL, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 29 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
ENVIRONMENTAL, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 30 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
INFRASTRUCTURE, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 31 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
INFRASTRUCTURE, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 32 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
PHARMACEUTICAL & LIFE SCIENCES, BY EXCITATION SOURCE TYPE,  
2015–2023 (USD MILLION)

Table 33 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
PHARMACEUTICAL & LIFE SCIENCES, BY DETECTOR TYPE, 2015–2023 (USD  
MILLION)

Table 34 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR  
CHEMICALS, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 35 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR

CHEMICALS, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 36 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR OIL & GAS, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 37 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR OIL & GAS, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 38 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR OTHERS, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 39 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR OTHERS, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 40 OPTICAL EMISSION SPECTROSCOPY MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 41 OPTICAL SENSING MARKET, BY REGION, 2015-2023 (USD MILLION)

Table 42 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 43 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY REGION, 2015–2023 (THOUSAND UNITS)

Table 44 OPTICAL EMISSION SPECTROSCOPY SERVICE MARKET, BY REGION, 2015–2023 (USD MILLION)

Table 45 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN NORTH AMERICA, BY COUNTRY, 2015–2023 (USD MILLION)

Table 46 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN NORTH AMERICA, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 47 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN NORTH AMERICA, BY FORM FACTOR, 2015–2023 (USD MILLION)

Table 48 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN NORTH AMERICA, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 49 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN EUROPE, BY COUNTRY, 2015–2023 (USD MILLION)

Table 50 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN EUROPE, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 51 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN EUROPE, BY FORM FACTOR, 2015–2023 (USD MILLION)

Table 52 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN EUROPE, BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 53 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN APAC, BY COUNTRY, 2015–2023 (USD MILLION)

Table 54 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN APAC, BY EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 55 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN APAC,

BY FORM FACTOR, 2015–2023 (USD MILLION)

Table 56 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN APAC,  
BY DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 57 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN ROW, BY  
REGION, 2015–2023 (USD MILLION)

Table 58 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN ROW, BY  
EXCITATION SOURCE TYPE, 2015–2023 (USD MILLION)

Table 59 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN ROW, BY  
FORM FACTOR, 2015–2023 (USD MILLION)

Table 60 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN ROW, BY  
DETECTOR TYPE, 2015–2023 (USD MILLION)

Table 61 TOP 5 PLAYERS IN OPTICAL EMISSION SPECTROSCOPY MARKET:  
EQUIPMENT PROVIDERS (2017)

Table 62 TOP 4 PLAYERS IN OPTICAL EMISSION SPECTROSCOPY MARKET:  
SERVICE PROVIDERS (2017)

Table 63 PRODUCT LAUNCHES AND DEVELOPMENTS, 2015–2018

Table 64 MERGERS & ACQUISITIONS, 2016–2018

Table 65 EXPANSIONS, 2015–2017

Table 66 AGREEMENTS, PARTNERSHIPS, AND COLLABORATIONS, 2015–2018

## List Of Figures

### LIST OF FIGURES

- Figure 1 OPTICAL EMISSION SPECTROSCOPY MARKET
- Figure 2 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET
- Figure 3 OPTICAL EMISSION SPECTROSCOPY MARKET: RESEARCH DESIGN
- Figure 4 OPTICAL EMISSION SPECTROSCOPY MARKET: RESEARCH APPROACH
- Figure 5 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH
- Figure 6 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH
- Figure 7 DATA TRIANGULATION
- Figure 8 FLOW OF REPORT WRITING
- Figure 9 OPTICAL EMISSION SPECTROSCOPY MARKET SCENARIO (2017)
- Figure 10 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL, 2018 VS. 2023
- Figure 11 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR SOLID-STATE DETECTORS TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD
- Figure 12 ARC/SPARK OES HELD LARGER SIZE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN 2017
- Figure 13 BENCHTOP OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET EXPECTED TO EXHIBIT HIGHEST GROWTH RATE DURING FORECAST PERIOD
- Figure 14 OPTICAL EMISSION SPECTROSCOPY MARKET, BY REGION, 2017
- Figure 15 ATTRACTIVE MARKET OPPORTUNITIES IN OPTICAL EMISSION SPECTROSCOPY MARKET (2018–2023)
- Figure 16 OPTICAL EMISSION SPECTROSCOPY SERVICE MARKET TO GROW AT HIGHEST CAGR BETWEEN 2018 AND 2023
- Figure 17 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR AUTOMOTIVE TO HOLD LARGEST MARKET SIZE BY 2023
- Figure 18 SOLID-STATE DEVICES TO DOMINATE OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET BETWEEN 2017 AND 2023
- Figure 19 ARC/SPARK OPTICAL EMISSION SPECTROMETERS TO HOLD LARGEST SIZE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET BY 2023
- Figure 20 APAC HELD LARGEST SHARE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN 2017
- Figure 21 BENCHTOP TO HOLD LARGEST SIZE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, IN TERMS OF VALUE, BY 2023
- Figure 22 CHINA HELD LARGEST SHARE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET IN 2017



Figure 23 MARKET DYNAMICS: OVERVIEW

Figure 24 OPTICAL EMISSION SPECTROSCOPY SERVICES MARKET TO GROW AT HIGHER CAGR DURING FORECAST PERIOD

Figure 25 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY TECHNOLOGY

Figure 26 BENCHTOP FORM FACTOR EXPECTED TO HOLD LARGEST SIZE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET BETWEEN 2018 AND 2023

Figure 27 ARC/SPARK OPTICAL EMISSION SPECTROSCOPY TO HOLD MAJOR SHARE OF OVERALL OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET BY 2023

Figure 28 APAC TO DOMINATE ARC/SPARK OES EQUIPMENT MARKET DURING FORECAST PERIOD

Figure 29 OPTICAL EMISSION SPECTROSCOPY MARKET, BY DETECTOR TYPE

Figure 30 SOLID-STATE DETECTORS TO DOMINATE OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET BETWEEN 2018 AND 2023

Figure 31 APAC TO DOMINATE SOLID-STATE DETECTOR OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BETWEEN 2018 AND 2023

Figure 32 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET, BY VERTICAL

Figure 33 AUTOMOTIVE TO HOLD LARGEST SIZE OF OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET BY 2023

Figure 34 ARC/SPARK OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKET FOR AUTOMOTIVE TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

Figure 35 OPTICAL EMISSION SPECTROSCOPY MARKET, BY REGION

Figure 36 OPTICAL EMISSION SPECTROSCOPY EQUIPMENT MARKETS IN INDIA, MEXICO AND CHINA TO GROW AT HIGH CAGR BETWEEN 2018 AND 2023

Figure 37 NORTH AMERICA: SNAPSHOT OF OES EQUIPMENT MARKET

Figure 38 EUROPE: SNAPSHOT OF OES EQUIPMENT MARKET

Figure 39 APAC: SNAPSHOT OF OES EQUIPMENT MARKET

Figure 40 COMPANIES ADOPTED PRODUCT LAUNCHES & DEVELOPMENTS AS KEY GROWTH STRATEGIES DURING 2015–2018

Figure 41 BUSINESS STRATEGIES ADOPTED BY MAJOR PLAYERS IN OPTICAL EMISSION SPECTROSCOPY MARKET BETWEEN 2015 AND 2018

Figure 42 THERMO FISHER: COMPANY SNAPSHOT

Figure 43 BRUKER: COMPANY SNAPSHOT

Figure 44 HITACHI HIGH-TECHNOLOGIES CORPORATION: COMPANY SNAPSHOT

Figure 45 AMETEK: COMPANY SNAPSHOT

Figure 46 SHIMADZU: COMPANY SNAPSHOT

Figure 47 HORIBA: COMPANY SNAPSHOT

Figure 48 PERKINELMER: COMPANY SNAPSHOT

Figure 49 AGILENT TECHNOLOGIES: COMPANY SNAPSHOT

Figure 50 SGS: COMPANY SNAPSHOT

Figure 51 BUREAU VERITAS: COMPANY SNAPSHOT

Figure 52 INTERTEK: COMPANY SNAPSHOT

Figure 53 TUV SUD: COMPANY SNAPSHOT

Figure 54 TUV RHEINLAND: COMPANY SNAPSHOT



## I would like to order

Product name: Optical Emission Spectroscopy Market by Offering (Equipment, Services) Form Factor, Excitation Source Type (Arc/Spark OES, ICP-OES), Detector Type, Vertical (Automotive, Scrap & Recycling, Aerospace & Defense), and Geography - Global Forecast to 2023

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