

# Scientific Research

# 科學研究

### 中葡平台

### 與波爾圖大學合作創辦葡語國際學術期刊

為進一步彰顯"中葡平台"優勢,增強澳門與葡語學術界的合作,以及提升澳門在國際學術界的地位,促進澳門、粵港澳大灣區、內地和其他亞洲地區葡語教學研究共同發展,學院葡語教學及研究中心與葡萄牙波爾圖大學文學院合作創辦葡語國際學術期刊《葡萄牙語的東方之路》,填補此領域學術期刊的空白,並為亞洲葡語學者提供一個展示學術成果、交流學術心得的平台。



《葡萄牙語的東方之路》 Orientes do Português

### 上線葡語教學資源

### 中葡英新型冠狀病毒防控詞彙

新型冠狀病毒出現以來,澳門、內地和多個國家及地區均採取了多項 措施抗擊疫情,取得積極的效果。學院積極關注疫情發展及防控情 況,透過綜合梳理各類疫情防控大數據,整理並發佈"中葡英新型冠 狀病毒防控詞彙",助力澳門和其他國家及地區開展抗疫防疫工作, 藉此推廣澳門在抗擊疫情方面的經驗。

### Cooperation Platform between China and Portuguese-Speaking Countries

### Jointly Published a Portuguese International Academic Journal with the University of Porto

In order to further manifest the advantages of Macao as a "cooperation platform between China and Portuguese-speaking countries", strengthen the cooperation between Macao and the Portuguese-language academic community, enhance Macao's influence in the global academia, and promote the joint development of Portuguese language teaching and research in Macao, the Guangdong-Hong Kong-Macao Greater Bay Area, mainland China and other Asian regions, the Centre for Portuguese Studies of MPI and the Faculty of Arts of the University of Porto in Portugal have co-founded a Portuguese international academic journal, *Orientes do Português*, as a means to solve the lack of such an academic journal in the field and to provide a platform for the Portuguese language scholars in Asia to showcase their academic achievements and conduct academic exchanges.

### Online Teaching Resources for Portuguese

## Chinese-Portuguese-English Glossary of Prevention and Control of Coronavirus

Since the emergence of the novel coronavirus, Macao, mainland China, and many countries and regions have taken a number of measures to combat the pandemic, and have achieved positive results. MPI actively pays attention to the development as well as prevention and control of the pandemic. By combing through all kinds of big data on pandemic prevention and control, it has formed and published the "Chinese-Portuguese-English Glossary of Prevention and Control of Coronavirus" to support Macao and other countries and regions in their pandemic prevention and control. In doing so, Macao's experience in fighting the pandemic is promoted.



### 葡萄牙語線上學習平台

2020年4月,"葡萄牙語線上學習平台"正式公開上線,該平台提供葡語學習相關的詞彙、音頻、視頻學習資料,涵蓋多場景中葡雙語會話、常用詞彙等,此外還包含與葡語國家文化有關的學習內容,讓葡語學習者和有興趣人士體驗豐富多彩的異域文化和語言魅力。

### 《環球葡萄牙語》

《環球葡萄牙語》為學院與里斯本大學合作,歷時十年為中國葡語學習者打造的精品教材。教材編寫內容合理,循序漸進,以交際教學法為指導原則,選擇貼近生活的話題,將語法知識貫穿於文章之中,注重學習者實際語言使用能力的提升。此外,教材中還融入了很多文化特色,使學習者在學習語言知識的同時,深入了解葡語國家及地區的風土人情和文學文化。2020年5月,《環球葡萄牙語》第一冊上線,向公眾開放葡語學習資源。

### 《吳為山的雕塑世界》葡文版

2020年6月,《吳為山的雕塑世界》葡文版上線,旨在向葡語國家、"一帶一路"沿線國家展示中國傳統文化藝術的博大精深,藉此彰顯澳門作為中西文化交流平台的優勢,推動中西方文化的交流和融合,特別是中國與葡語國家的文化對話和交流。

### Online Portuguese Language Learning Platform

In April 2020, the "Online Portuguese Language Learning Platform" was officially launched to the public. The platform provides vocabulary as well as audio and video learning materials related to Portuguese language learning, covering multi-scenario Chinese-Portuguese bilingual conversations, commonly used words, etc. In addition, it includes contents related to the culture of Portuguese-speaking countries, so that Portuguese language learners and those interested can experience the richness and diversity of the foreign culture and language.

### Global Portuguese

The *Global Portuguese* is a high-quality textbook created for Chinese Portuguese language learners by MPI in cooperation with the University of Lisbon in Portugal over the past ten years. The contents of the textbook are reasonable and progressive. With the communicative language teaching approach as the guiding principle, topics close to life are chosen, and grammatical knowledge is integrated into the articles, focusing on the improvement of learners' ability to use the language in real life. Moreover, many cultural features have been incorporated into the textbook, enabling learners to gain a deep understanding of the customs and literary culture of Portuguese-speaking countries and regions while learning linguistic knowledge. In May 2020, the first volume of the *Global Portuguese* was launched online, opening Portuguese language learning resources to the public.

### The Portuguese Version of the World Sculpture of Wu WeiShan

In June 2020, the Portuguese version of the *World Sculpture of Wu WeiShan* was launched online. This book is intended to showcase the broadness and profoundness of traditional Chinese culture and arts to Portuguese-speaking countries and countries along the "Belt and Road", and to manifest Macao's advantages as a platform for cultural exchanges between China and the West, for the purpose of further promoting the exchanges and integration between Chinese and Western cultures, especially the cultural dialogues and exchanges between China and Portuguese-speaking countries.





### 與東方葡萄牙學會合辦國際研討會

由學院葡語教學及研究中心和東方葡萄牙學會聯合舉辦題為 "澳門與葡語:通往東方的新橋樑"國際學術研討會,探討澳門作為 "中葡平台"在連接中國和葡語國家,以及在推廣葡萄牙語言文化方面發揮的突出作用。



與東方葡萄牙學會合辦國際研討會

An international seminar co-organised with the Portuguese Institute of the Orient (IPOR)

### 人工智能

### 成立港澳地區首家國家教育部工程研究中心

在國家和特區政府大力支持下,學院正式獲得國家教育部批准立項成立"機器翻譯暨人工智能應用技術教育部工程研究中心",並於2019年12月舉行揭牌儀式,成為港澳地區第一家教育部工程研究中心,充分顯示了國家教育部對學院的肯定,也是國家對澳門參與建設粵港澳大灣區國際科技創新中心的大力支持,標誌著澳門科學教育發展邁上新的台階,體現了澳門正積極加快區域融合、融入粵港澳大灣區和國家的發展大局。

中心的成立填補了中葡機器翻譯在學術領域的空白,成為學術成果產品化及多學科、多實體聯合的重要科研和應用平台。現階段主要從事基於漢語、葡萄牙語及英語的先進機器翻譯技術的研究,以及相應的

# An International Seminar co-organised with the Portuguese Institute of the Orient (IPOR)

The Centre for Portuguese Studies of MPI and the Portuguese Institute of the Orient (IPOR) jointly organised the "Macao and Portuguese: A New Bridge to the East" International Academic Seminar to discuss the prominent role of Macao, a cooperation platform between China and Portuguese-speaking countries, in connecting China and Portuguese-speaking countries as well as in popularising Portuguese language and culture.

### Artificial Intelligence

# Establishment of the First Engineering Research Centre of the Ministry of Education in Hong Kong and Macao

With the strong support of the motherland and the SAR Government, MPI officially obtained the approval of the Ministry of Education to establish the "Engineering Research Centre of Applied Technology on Machine Translation and Artificial Intelligence, Ministry of Education", the first engineering research centre of the Ministry of Education in Hong Kong and Macao. Its unveiling ceremony was held in December 2019. The approval of the Ministry of Education has fully demonstrated not only its recognition for MPI but also our country's strong support for Macao's participation in the development of an international innovation and technology hub in the Guangdong-Hong Kong-Macao Greater Bay Area. Moreover, the establishment of the Centre marks a new stage in the development of Macao's science education and reflects that Macao is actively accelerating regional integration and integrating into the overall development of the Guangdong-Hong Kong-Macao Greater Bay Area and the motherland.

The Centre is intended to complement the Chinese-Portuguese/Portuguese-Chinese machine translation in the academic field. It has become an important scientific research and application platform for the production of academic achievements and the collaboration between multiple disciplines and entities. At this stage, the Centre is mainly engaged in the research of advanced machine translation technology based on Chinese, Portuguese and English, as well as the development of corresponding applications. It has made fruitful milestone achievements so far. Its multiple products include the Chinese-Portuguese-English Machine Translation Platform, the Official Document Translation System, the "Diz



應用開發工作。目前,中心已取得了豐碩的階段性成果,共推出多項產品如:中葡英機器翻譯平台、公文輔助翻譯系統、Diz lá 手機軟件、中葡英語音識別同傳系統、葡萄牙語線上學習平台、新型冠狀病毒防控中葡英詞彙線上平台,以及中葡語料管理系統和翻譯質量人工評測系統。

在此基礎上,中心未來將重點打造"一帶一路"語言大數據庫,研發更多高水平的應用產品,為國家"一帶一路"建設,實現語言互通提供科技支援和語言服務。同時,結合澳門經濟建設、社會發展、中西文化交流平台、城市管理及旅遊服務業的實際經驗,開展綜合應用創新研究,開發具有自主知識產權和核心技術的人工智能、機器翻譯應用產品和服務;透過開展跨學科研究,實現科學技術創新和關鍵技術突破,助力澳門經濟適度多元化發展,以及粵港澳大灣區國際科技創新中心的建設。

lá!" App, the Chinese-Portuguese-English Voice Recognition Simultaneous Interpretation System, the Online Portuguese Language Learning Platform, the Chinese-Portuguese-English Glossary of Prevention and Control of Coronavirus Online Platform, as well as the Chinese & Portuguese Corpus Management System and the Manual Translation Quality Evaluation System.

On this basis, the Centre will focus on building a large language database of the "Belt and Road" in the future, apart from researching and developing more high-level applied products, so as to provide technological support and language services for realizing language intercommunication under the national "Belt and Road" Initiative. Meanwhile, based on Macao's practical experience in economic construction, social development, Chinese and Western cultural exchanges, urban management and travel-related services, the Centre will carry out research on comprehensive application innovation, and will develop artificial intelligence and machine translation application products and services with independent intellectual property rights and core technologies. Through interdisciplinary research, the Centre will endeavour to achieve scientific and technological innovation and make key technological breakthroughs, so as to support the moderately diversified economic development of Macao and the development of an international innovation and technology hub in the Guangdong-Hong Kong-Macao Greater Bay Area.

成立港澳地區首家國家教育部工程研究中心

Establishment of the first Engineering Research Centre of the Ministry of Education in Hong Kong and Macao



### "太陽能汽車人工智能項目" 亮相第二屆中國國際進口博覽會

在上海舉行的第二屆中國國際進口博覽會上,學院與意大利博洛尼亞 大學科研團隊共同展示科研成果"太陽能汽車人工智能項目"。博覽 會期間,學院科研團隊在"沿新絲路的意大利科技與設計"研討會上, 就可持續運輸議題發言,推廣澳門的科技創新成果。

學院與意大利博洛尼亞大學合作的"太陽能汽車人工智能項目"奪得"美國太陽能挑戰賽"冠軍,並獲得了最佳機械和複合材料使用獎,以及最佳電池項目獎。該比賽為世界各地大學開發太陽能汽車而設的國際競賽,目的是通過太陽能的利用以應對城市污染和全球暖化,改善人類生活及環境污染問題。

"太陽能汽車人工智能項目" 亮相第二屆中國國際進口博覽會

The "Sustainable Mobility in the Era of Smart Cities: Exploiting Sun Powered Electricity" Project unveiled at the  $2^{\rm nd}$  China International Import Expo

# The "Sustainable Mobility in the Era of Smart Cities: Exploiting Sun Powered Electricity" Project Unveiled at the 2<sup>nd</sup> China International Import Expo

At the 2<sup>nd</sup> China International Import Expo held in Shanghai, the scientific research teams of MPI and the University of Bologna in Italy jointly presented their scientific research achievement, the "Sustainable Mobility in the Era of Smart Cities: Exploiting Sun Powered Electricity". During the expo, the MPI scientific research team gave a speech on sustainable transport at the "Italian Technology & Design along the New Silk Road" seminar to promote Macao's scientific and technological innovations.

The "Sustainable Mobility in the Era of Smart Cities: Exploiting Sun Powered Electricity", a collaborative project between MPI and the University of Bologna in Italy, won the championship of the "American Solar Challenge", apart from the award for the best mechanical design and use of composites and the award for the best battery design. The "American Solar Challenge" is an international competition for colleges and universities around the world to develop solar-powered cars, with the aim of improving human life and environmental pollution through the use of solar energy to combat urban pollution and global warming.





# 舉辦"大數據時代的機器翻譯、人工智能與智慧城市"專題論壇

學院聯同語言大數據聯盟、廣東外語外貿大學、香港大學專業進修學院,於 2020 年 7 月舉辦 "大數據時代的機器翻譯、人工智能與智慧城市"專題論壇。

論壇由京粵港澳專家學者主講,分享機器翻譯、人工智能及智慧城市 建設領域的最新科研成果,藉此推動前沿科技領域合作和智慧灣區的 建設,進一步促進澳門融入粵港澳大灣區和國家的發展大局,助力粵 港澳大灣區和"一帶一路"的建設與發展。

### 資訊科技領域的尖端技術研究

理工一倫敦大學瑪麗皇后學院資訊系統研究中心專注於資訊科技領域的尖端技術研究,研究成果獲資訊科技領域重要的學術期刊或會議發表,至今獲 Scopus 文獻搜尋刊物發表之學術論文超過 100 多篇。目前,中心的兩項主要研究包括:一是面向未來無線網絡的一個關鍵技術 "網絡切片技術";二是關於透過藍牙 5.1 的使用為視障人士提供室內定位。

另外,應用科學高等學校的資訊科技領域決策模型研究論文 "多用途的隨機對決賽局",獲刊登於期刊引用報告數學領域排名前 8.6%的國際知名學術期刊《數學》上,並獲收錄於 SCIE 和 Scopus 資料庫。該研究是針對對決模式下持續狀態的標準二人隨機賽局模型所進行研究的課題,並提出了一個嶄新且適用於多種決策情境下的混合性數學模型。

# The Online Thematic Forum on "Machine Translation, Artificial Intelligence and Smart Cities in the Big Data Era"

MPI, in conjunction with the Language Big Data Alliance, Guangdong University of Foreign Studies, and the School of Professional and Continuing Education of the University of Hong Kong (HKU SPACE), held the Online Thematic Forum on "Machine Translation, Artificial Intelligence and Smart Cities in the Big Data Era" in July 2020.

At the forum, experts and scholars from Beijing, Guangdong, Hong Kong and Macao shared the latest scientific research achievements in the fields of machine translation, artificial intelligence and smart city construction, so as to encourage cooperation in cutting-edge scientific and technological fields, facilitate the construction of smart bay areas, further promote Macao's integration into the overall development of the Guangdong-Hong Kong-Macao Greater Bay Area and the motherland, and to support the construction and development of the Guangdong-Hong Kong-Macao Greater Bay Area and the "Belt and Road".

# Cutting-Edge Technology Research in the Field of Information Technology

The MPI-QMUL (Queen Mary University of London) Information Systems Research Centre focuses on cutting-edge technology research in the field of information technology. Its research results have been published in important academic journals or conferences in the field of information technology. So far, more than 100 academic articles have been published in journals included in Scopus. At present, the Centre has two major research projects: First, "network slicing technology", a key technology for future wireless networks; second, provision of indoor positioning for the visually impaired through the use of Bluetooth 5.1.

Additionally, a research paper on decision-making models in the field of information technology entitled "A Versatile Stochastic Dual Game" from the School of Applied Sciences has been published in *Mathematics*, an internationally renowned academic journal among the top 8.6% of journals in the Mathematics category according to rankings in the Journal Citation Reports (JCR). It is also included in the SCIE and Scopus databases. The research concerns the standard stochastic dual game model of the continuous state in a dual game mode, and produces a new mixed mathematical model suitable for multiple decision-making scenarios.



### GLOBAL GAMING N TOURISM RESEARCH 世界博彩與旅遊研究

第一卷/2020年/第一期



《世界博彩與旅遊研究》 Global Gaming & Tourism Research

### 博彩及旅遊

### 出版《世界博彩與旅遊研究》學術期刊

為提升澳門在旅遊休閒領域研究的國際影響力,鞏固澳門"世界旅遊休閒中心"的地位,學院聚集博彩與旅遊範疇的世界知名專家學者,於2020年出版《世界博彩與旅遊研究》,為博彩與旅遊研究搭建交流平台推動澳門博彩與旅遊業可持續發展,並為政府和博彩企業的科學決策提供學術支援。

《世界博彩與旅遊研究》涵蓋世界博彩產業發展趨勢、澳門博彩產業的發展趨勢、博彩遊客的消費偏好演變趨勢、負責任博彩理論與實踐、遊客行為理論與案例研究、旅遊目的地管理理論與實踐等重點研究領域。

### 發佈賭客博彩行為演變趨勢研究成果

2020 年 7 月,博彩旅遊教學及研究中心發佈"賭客疲勞:賭客博彩行為演變趨勢"研究成果,探討澳門居民、莊荷及內地博彩顧客的博彩行為演變趨勢,以促進博彩業發展策略制定的前瞻性,推動博彩業持續健康發展。

發佈賭客博彩行為演變趨勢研究成果

Research Results on the evolving trends of gaming behaviour among gamblers



### **Gaming and Tourism**

### The Academic Journal Global Gaming & Tourism Research

In order to enhance Macao's international influence in the field of tourism and leisure research and to consolidate Macao's status as a "World Centre of Tourism and Leisure", MPI organised world-renowned experts and scholars in the field of gaming and tourism to create the journal, *Global Gaming & Tourism Research*. In 2020, the first issue of the journal was published, providing an exchange platform for gaming and tourism research to promote the sustainable development of Macao's gaming and tourism industry, and offering academic support for the scientific decision-making by the government and gaming enterprises.

The *Global Gaming & Tourism Research* journal covers the development trends of the world's gaming industry, the development trends of Macao's gaming industry, the evolving trends of gambling tourists' consumption preferences, the theory and practice of responsible gambling, tourist behaviour theories and case studies, as well as tourist destination management theories and practice, among other key research areas.

# Research Results on the Evolving Trends of Gaming Behaviour among Gamblers

In July 2020, the Gaming Teaching and Research Centre announced the research results of "Gamblers' Fatigue: The Evolving Trends of Gaming Behavior among Gamblers", a research project that explores the evolving trends of the gaming behaviour among Macao residents, dealers and mainland gaming customers, for the purpose of improving the forward-looking nature of gaming industry development strategies, and promoting the sustainable and healthy development of the gaming industry.





博彩娛樂範疇系列專題講座

Lectures on Gaming and Entertainment

### 舉辦博彩娛樂範疇系列專題講座

為提升學生的學術素養和專業能力,博彩旅遊教學及研究中心舉辦博彩娛樂範疇系列專題講座,邀請博彩相關專業的權威學者主講,主題包括:"互聯網世界中的博彩市場:以互聯網博彩為例"、"遊戲、博彩及遊戲博彩化"等。

### 文化創意

### 舉辦社區文創成果展和文創論壇

學院致力推動澳門文創產業發展,培育文創及相關行業人才,提 升社區文創競爭力,期望通過文化創意注入社區的概念,讓社區 文化創意活力成為澳門城市特色與可持續發展的亮點之一。

為響應特區政府"藝文薈澳"藝文盛會,學院舉辦"創藝理工"系列活動。2019年9月,學院與文化產業基金合辦"社區文創成果展",並與中華文化交流協會及北京大學文化產業研究院合辦"創意·美食與社區"文創論壇,向社會各界展示文創優化成果,推動社區創意發展,助力澳門"世界旅遊休閒中心"和"創意城市美食之都"建設。

社區文創成果展 2019

Cultural Creative Community
Achievements Exhibition 2019



### **Lectures on Gaming and Entertainment**

In order to improve the academic literacy and professional competence of students, the Centre for Gaming and Tourism Studies put on a series of lectures on gaming and entertainment. It invited authoritative scholars of gaming-related majors to give lectures. The topics of the lectures included "Gambling Markets in an Interconnected World: The Case of Internet Gambling", and "Games, Gambling, and Gamblification".

### **Cultural and Creative Industries**

# The Cultural Creative Community Achievements Exhibition and the Cultural Creative Forum

MPI is committed to promoting the development of Macao's cultural and creative industries, cultivating talent in cultural and creative as well as related industries, and enhancing the cultural creative competitiveness of communities. It hopes to make the cultural creative vitality of communities as one of the highlights of Macao's urban characteristics and sustainable development through the injection of cultural creativity into communities.

In response to the SAR Government's "Art Macao" arts and cultural event, MPI organised the "MPI Art-Venture" Events Activity Series. In September 2019, MPI co-organised the "Cultural Creative Community Achievements Exhibition" with the Cultural Industries Fund, and held the Forum on "Creativity, Gastronomy and Community" in cooperation with the Chinese Cultural Exchange Association and the Institute for Cultural Industries of Peking University to showcase the achievements of cultural creativity optimisation to all sectors of society, promote the development of creative communities, and support Macao's development into a "World Centre of Tourism and Leisure" and a "Creative City of Gastronomy".



"十面圍觀"優秀學生作品展

The "Decagon Explore" Outstanding Student Design Works Exhibition



### 舉辦"十面圍觀"優秀學生作品展

2019年10月,學院與創意空間創意產業中心合辦"十面圍觀"優秀學生作品展。參展作品包括:攝影、立體設計、字體設計、包裝設計、空間設計和數碼媒體設計等。部分作品更獲入選第八屆大理國際影會,以及獲得第四屆"Y設計展"澳門畢業設計作品聯展視覺傳達組別的十優獎項等。

### 多元活動探討文創發展新趨勢

2020年1月舉辦文創沙龍和工作坊,邀請澳門文創業界代表、藝術家,以及香港恆生大學文化及創意產業課程師生,與學院跨領域藝術碩士學位課程師生面對面交流,激發多元創意思考,並走進文創社區,現場考察澳門文創產業營運情況,共同探討文創發展新趨勢。

多元活動探討文創發展新趨勢

Diversified activities to explore the new trend of cultural creative development

# The "Decagon Explore" Outstanding Student Design Works Exhibition

In October 2019, MPI and the Creative Macau - Center for Creative Industries jointly organised the "Decagon Explore" Outstanding Student Design Works Exhibition. The exhibits included photography, three-dimensional design, font design, packaging design, spatial design and digital media design. Some of the works were selected into the 8<sup>th</sup> Dali International Photography Exhibition, and won the Macau Art Graduates Joint Exhibition Visual Design Category Top Ten Awards in the 4<sup>th</sup> "Y Show".

# Diversified Activities to Explore the New Trend of Cultural Creative Development

In January 2020, a cultural creative salon and workshop was held. Representatives and artists of Macao's cultural and creative industries, as well as teachers and students of the Cultural and Creative Industries programme from the Hang Seng University of Hong Kong were invited to communicate face-to-face with the teachers and students of MPI's Master of Interdisciplinary Arts programme so as to stimulate diverse creative thinking. During the activity, the participants also visited cultural creative communities to learn about the operation of Macao's cultural and creative industries on site. Together, they discussed the new trend of cultural creative development.





《澳門理丁學報》

Journal of Macao Polytechnic Institute

### 人文社科

### 出版綜合性人文社會科學學術理論刊物

《澳門理工學報》(人文社會科學版)是學院主辦的綜合性人文社會科學學術理論刊物。2011年改版以來,學報的學術影響力得以明顯提升,2019年榮膺"全國高校社科名刊"。

在中國人民大學複印報刊資料轉載指數排名中,《澳門理工學報》連續7年穩居全國前列,2019年度轉載率位列"全國高等院校主辦人文社科學報"第3名。

中國人文社會科學綜合評價研究院 2019 年發佈了 "最受學界歡迎的 10 種港澳台學術期刊",《澳門理工學報》榮列其中。此外,學報發表的多篇文章也被《新華文摘》、《中國社會科學文摘》及《高等學校文科學術文摘》等二次文獻轉載。

### 中西文化研究

中西文化研究所舉辦多項講座,包括: "二戰期間日本與澳葡關係"、 "南京大屠殺的歷史及其研究"、"時勢、史觀與西人關於中國近代 史的早期論述"、"中學歷史教學三十年回顧與展望"、"如何定義 語素和詞"、"動詞的目的義及其在詞典釋義中的處理",以及"非 遺公用:非遺藏品票的創新探索"等。

中西文化研究所舉辦多項講座 The Centre of Sino-Western Cultural Studies held a number of lectures



### **Humanities and Social Sciences**

# A Comprehensive Academic Journal of Theories in Humanities and Social Sciences

The *Journal of Macao Polytechnic Institute* (Humanities and Social Sciences Edition) is a comprehensive academic journal of theories in humanities and social sciences sponsored by MPI. Since its revision in 2011, the academic influence of the journal has been significantly enhanced. In 2019, it was awarded the title of "National Reputed College Journal in Social Sciences".

According to the rankings of the index of academic articles in the "Replicated Journals" produced by Renmin University of China, for seven consecutive years, the *Journal of Macao Polytechnic Institute* has been at the forefront of all replicated journals in China. Its reprint rate in 2019 ranked third among all "National Journals in Humanities and Social Sciences Sponsored by Institutions of Higher Education".

In 2019, the Comprehensive Evaluation Institute for Humanities and Social Sciences in China released the "10 Academic Journals of Hong Kong, Macao and Taiwan Most Popular with the Academia". The *Journal of Macao Polytechnic Institute* was listed. Furthermore, many articles published in the journal were reprinted by secondary publications such as the *Xinhua Digest*, the *Chinese Social Science Digest*, and the *China University Academic Abstracts*.

### Sino-Western Cultural Studies

The Centre of Sino-Western Cultural Studies held a number of lectures, including "Japan's Relations with Macao and Portugal During World War II", "The History and Research of the Nanjing Massacre", "Historical Contexts, Historical Perspective, and Westerners' Narrative of the Chinese Early Modern History", "Review of Thirty-Year History Teaching at Middle Schools and Its Prospects", "How to Define Morphemes and Words", "The Purpose Meanings of Verbs and How They Are Handled in Dictionary Definitions", and "Public Use of Intangible Cultural Heritage: Innovative Exploration of ICH Graphic Arts".



"風雨同行·共創輝煌"——澳門與祖國 內地關係 70 年暨澳門回歸 20 週年展覽

"Hand in Hand Against All Odds": The 70 Years of Macao-Mainland Relationship and the 20<sup>th</sup> Anniversary of Macao's Return to the Motherland Exhibition



### 語言文化研究

澳門語言文化研究中心舉辦 "風雨同行·共創輝煌" ——澳門與祖國內地關係70年暨澳門回歸20週年展覽,以數百幅直觀、形象、生動的圖片,客觀地記錄了澳門與祖國70年來的緊密聯繫,謳歌20年來 "一國兩制"在澳門的輝煌成就和滄桑巨變,展示澳門特區在基本法保障下社會和諧、經濟飛躍、民生安康的實況。中心出版了《傳承出新:澳門非物質文化遺產》和《傳承出新:非物質文化遺產影像實錄》。前者為學院與澳門日報聯合策劃出版的《澳門記憶叢書》之一,全面介紹2020年之前列入澳門非遺清單的15項非物質文化遺產。後者為大型攝影集,結集了澳門攝影家陳顯耀近20年以鏡頭記錄的澳門非遺活動精彩瞬間。

### 社會經濟與公共政策研究

社會經濟與公共政策研究所於 2019 年 12 月舉辦 "回歸 20 年澳門公 共治理的回顧與展望"學術研討會。會議從公共行政與政府改革、社 會發展與社會治理、區域合作與區域治理、多元文化與教育發展四個 專題展開交流與探討。

研究所承擔及完成多項研究課題,撰寫多項研究報告,部分成果獲政 府相關部門採納。

### Research in Language and Culture

The Language and Culture Research Centre of Macao held the "Hand in Hand Against All Odds": The 70 Years of Macao-Mainland Relationship and the 20<sup>th</sup> Anniversary of Macao's Return to the Motherland Exhibition. Hundreds of realistic, lifelike and vivid pictures objectively recorded the close ties between Macao and the motherland in 70 years. Some praised the glorious achievements and great changes of the "One Country, Two Systems" policy in Macao over the past 20 years. Some showed the social harmony, economic leap, and people's well-being of the Macao SAR under the protection of the Basic Law. The Centre published the *Inheritance and Innovation: Macao Intangible Cultural Heritage* and the *Inheritance and Innovation: Intangible Cultural Heritage Photo Recording*. The former is one of the *Collection of Macao's Memories* jointly planned and published by MPI and the Macao Daily News. It comprehensively introduces the 15 intangible cultural heritage elements included on the Intangible Cultural Heritage List of Macao before 2020. The latter is a large photography collection that contains the wonderful moments of Macao's intangible cultural heritage activities recorded by Macao photographer Chen Xianyao over the past 20 years.

### Research in Social, Economic and Public Policy

The Social, Economic and Public Policy Research Centre convened the Academic Conference on "Review and Prospect of Public Governance on the 20<sup>th</sup> Anniversary of the Establishment of the Macao SAR" in December 2019. Participants at the conference held exchanges and discussions on four topics, namely public administration and government reform, social development and social governance, regional cooperation and regional governance, as well as multicultural and educational development.

The Centre has undertaken and completed a number of research projects. It has also produced a number of research reports. Some of its achievements have been adopted by relevant government departments.



### "一國兩制"研究

2019年12月,"一國兩制"研究中心舉辦慶祝澳門特區成立20週年暨"一國兩制"高端論壇2019——澳門特別行政區公共行政與法律新發展。2020年7月,舉辦"'一國兩制'實踐中的公共政策"學術研討會。本學年,中心出版了4期《"一國兩制"研究》中文版期刊。

中心持續與行政公職局和澳門基本法推廣協會聯合舉辦"澳門基本法高級研討班課程"、"澳門基本法研討班課程"。同時,亦參與行政公職局"公務人員晉階培訓"及"公務人員基本培訓課程"兩項系列培訓課程中的"一國兩制"與《澳門基本法》相關單元的教學工作。

### Research in "One Country, Two Systems"

In December 2019, the "One Country, Two Systems" Research Centre held the Celebration for the 20<sup>th</sup> Anniversary of the Establishment of the Macao Special Administrative Region & "One Country, Two Systems" Advanced Forum 2019 — The New Development of Public Administration and Legislation in Macao SAR. In July 2020, an academic seminar on Public Policies in the Implementation of "One Country, Two Systems" was held. Moreover, the Centre published four issues of the *Journal of "One Country, Two Systems" Studies* (Chinese Version) this academic year.

The Centre continued to cooperate with the Public Administration and Civil Service Bureau and the Macao Association of Basic Law Promotion in running the two courses of the "Advanced Seminar on the Basic Law of Macao" and "Seminar on the Basic Law of Macao". It also participated in the teaching related to "One Country, Two Systems" and "Basic Law of Macao" under two series of training courses entitled "Advanced Training for Civil Servants" and "Basic Training Course for Civil Servants" organised by the Public Administration and Civil Service Bureau.



"One Country, Two Systems" Advanced Forum



### 學術成果

### 學術論文

多年來,學院科研人員發表學術論文 2,765篇,SCIE、SSCI、AHCI、EI、SCOPUS 等引文索引刊物的論文 1,125篇,中文核心期刊的論文 574篇。本學年,學院人員共發表學術論文 173篇,其中 SCIE、SSCI、AHCI、EI、Scopus 等引文索引刊物的論文 47篇,部分更發表於 Frontiers in Physiology、IEEE Access、Industrial & Engineering Chemistry Research、IT Professional、Journal of Cleaner Production、Journal of Gambling Studies、Journal of Medical Internet Research、Journal of Retailing and Consumer Services、Journal of Science and Medicine in Sport、Mathematics、Nutrients、Physical Chemistry Chemical Physics 等在學科內影響力因子排名前 30%的期刊上。

被國際知名引文數據庫 Scopus 索引的學術論文 49篇,研究領域涉及農業與生物科學、生物化學,遺傳學和分子生物學、商業、管理和會計、化學、計算機科學、決策科學、經濟學、計量經濟學與金融學、能源學、工程、環境科學、衛生專業、免疫學和微生物學、材料科學、數學、藥物學、神經科學、護理學、藥理學、毒理學、社會科學、物理和天文學等。

中文核心期刊的論文 16 篇,分別發表於《中國行政管理》、《中國 青年社會科學》、《中國音樂》、《中國語文》、《中華預防醫學雜 誌》、《科技導報》、《華南師範大學學報》、《國家教育行政學院 學報》、《情報雜誌》、《循證醫學》、《當代修辭學》、《福建師 範大學學報》(哲學社會科學版)、《新鄉醫學院學報》、《暨南學 報》(哲學社會科學版)、《藥學學報》和《護理學雜誌》等刊物上; 國際及本地學術會議論文 32 篇;書章 10 篇。

### **Academic Outputs**

### **Academic Articles**

Over the years, MPI faculty members have published 2,765 academic articles, including 1,125 articles published in journals included in citation index databases such as SCIE, SSCI, AHCI, EI, and Scopus, as well as 574 articles published in core Chinese journals. In this academic year, 173 academic articles were published by MPI faculty members, among which 47 articles were published in journals included in citation index databases such as SCIE, SSCI, AHCI, EI, and Scopus. Some articles were published in the top 30% of journals ranked by impact factor, including *Frontiers in Physiology, IEEE Access, Industrial & Engineering Chemistry Research, IT Professional, Journal of Cleaner Production, Journal of Gambling Studies, Journal of Medical Internet Research, Journal of Retailing and Consumer Services, Journal of Science and Medicine in Sport, Mathematics, Nutrients, Physical Chemistry Chemical Physics.* 

A total of 49 academic articles were indexed by Scopus, an internationally renowned indexing database, covering research areas including but not limited to agricultural and biological sciences, biochemistry, genetics and molecular biology, business, management and accounting, chemistry, computer science, decision sciences, economics, econometrics and finance, energy science, engineering, environmental science, health sciences, immunology and microbiology, materials science, mathematics, pharmacy, neuroscience, nursing science, pharmacology, toxicology, social sciences, physics, and astronomy.

16 articles were published in core Chinese journals, including *Chinese Public Administration, Journal of Chinese Youth Social Science, Chinese Music, Studies of the Chinese Language, Chinese Journal of Preventive Medicine, Science & Technology Review, Journal of South China Normal University, Journal of National Academy of Education Administration, Journal of Intelligence, Evidence-Based Medicine, Contemporary Rhetoric, Journal of Fujian Normal University* (Philosophy and Social Sciences Edition), *Journal of Xinxiang Medical University, Journal of Jinan University* (Philosophy & Social Science Edition), *Acta Pharmaceutica Sinica B,* and *Journal of Nursing Science*. There were also 32 local and international academic conference papers, as well as ten book chapters.



### 出版物

本學年,學院出版的學術著作 24 項,範疇涵蓋"一國兩制"、葡語 文學、高等教育、文化、歷史等與澳門息息相關的研究。

學院定期出版學術刊物《澳門理工學報》(人文社會科學版)、《"一國兩制"研究》、《葡萄牙語的東方之路》和《世界博彩與旅遊研究》,教研人員著作由海內外出版機構 Springer、中華書局出版社等出版。

### 科研投放

本學年立項的學院科研項目涵蓋健康科學、醫藥、運動生理、博彩旅遊、藝術等研究領域。另外,為推動教學人員與環球學者進行學術交流,學院鼓勵教學人員參加學術會議發表學術成果。在抗疫期間,學院教研人員通過線上方式積極參與高質量的國際研討會,大部分發表的論文獲收錄於 EI及 Scopus 等資料庫,議題領域廣泛,涵蓋教育、文學、商貿、資訊科技、藝術、護理等。

### 外界資助 / 委託研究項目

作為服務澳門社會的高等院校,學院每年均獲政府部門或其他外界機構委託、資助或透過公開招標的方式進行項目研究。本學年獲政府部門及外界機構委託的研究項目共3項。此外,研究項目"下一代無線通信系統中 Polar 編碼的設計和優化",獲科學技術發展基金資助經費。

### **Books and Other Publications**

In Academic Year 2019/2020, MPI published 24 academic monographs, covering topics such as "One Country, Two Systems", Portuguese literature, higher education, culture, history, and other themes closely related to Macao.

MPI publishes academic journals periodically which include the *Journal of Macao Polytechnic Institute* (Humanities and Social Sciences Edition), the *Journal of "One Country, Two Systems" Studies*, the *Orientes do Português*, and the *Global Gaming & Tourism Research*. Works of MPI faculty members are published by Springer, Zhonghua Book Company Publishing House, and other domestic or overseas publishing agencies.

### **Research Input**

In Academic Year 2019/2020, the established scientific research projects of MPI covered such research areas as health sciences, medicine, sports physiology, gaming and tourism, as well as arts. In addition, MPI encouraged its faculty members to attend academic conferences and present their academic achievements, as a means to encourage academic exchanges between its faculty members and scholars from around the world. During the fight against the COVID-19 pandemic, MPI faculty members actively participated in high-quality international seminars online. Most of the published academic articles have been included in databases such as EI and Scopus, covering a wide range of areas, including education, literature, business and trade, information technology, arts, and nursing.

### External Funding / Commissions

As a higher education institution serving the community of Macao, MPI is commissioned, funded or supported with open tenders by government departments or other external organisations each year to conduct research. In this academic year, a total of three research projects were commissioned by government departments and external organisations. Moreover, the research project "Design and Optimisation of Polar Codes for Next Generation Wireless Communication Systems" received a grant from the Fund for the Development of Science and Technology.



