

**11TH INTERNATIONAL  
CONFERENCE ON  
ADVANCED  
MATERIALS &  
NANOTECHNOLOGY**

**AMN**



Te Mana Tangata Whakawhanake  
**MacDiarmid Institute**  
Advanced Materials & Nanotechnology

**ŌTAUTAHI CHRISTCHURCH  
NEW ZEALAND**

**9-13 FEBRUARY 2025**

# 11TH INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS & NANOTECHNOLOGY

**CONFERENCE LOCATION: CHRISTCHURCH, NEW ZEALAND**

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**DATE: 9TH - 13TH FEBRUARY 2025**

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**CONFERENCE WEBSITE: WWW.AMN11.CO.NZ**

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On behalf of the **MacDiarmid Institute for Advanced Materials and Nanotechnology** and the **conference organising committee**, we would like to invite you to join us in New Zealand for the 11th biannual conference series on Advanced Materials and Nanotechnology. Since the inaugural conference in Wellington in 2003, the conference has toured the country. Now, AMN11 welcomes you to Christchurch, Ōtautahi. Framed by the snowy Southern Alps to the west and the Pacific to the east, the city is the largest in the South Island and is host to wide open spaces, modern architecture, and heritage buildings.

The AMN conference series is interdisciplinary and covers a broad variety of topics in material science and nanotechnology. It brings together professionals from material science, chemistry, physics, biology, and engineering, resulting in stimulating discussions that range from fabricating electronic devices to the examination of protein structures.

The conference is set to provide an enriching experience with a lineup of high-impact plenary and keynote presentations, complemented by engaging invited and contributed talks that showcase the latest advancements in diverse fields. The program extends beyond informative sessions to include a spectrum of scientific and social events. Where attendees can anticipate an immersive platform that encourages the exchange of ideas, paving the way for cross-disciplinary collaborations.

We hope you will join us at AMN11 and look forward to meeting you in February 2025.

# Conference Themes:

## Towards Zero Waste

- Recovering valuable materials from waste
- Next-generation sustainable materials
- Optimising material use
- Preventing microplastics pollution
- Reconfigurable systems



## Towards Zero Carbon

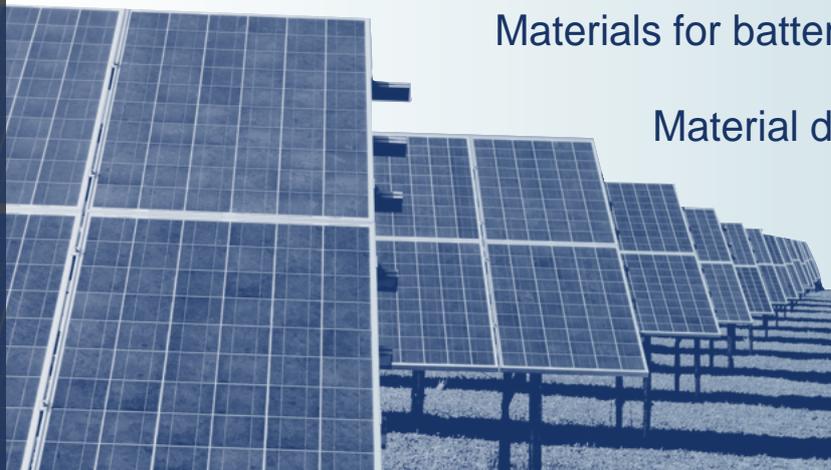
Materials for batteries and energy storage systems

Material discovery using machine learning

CO<sub>2</sub> capture and conversion

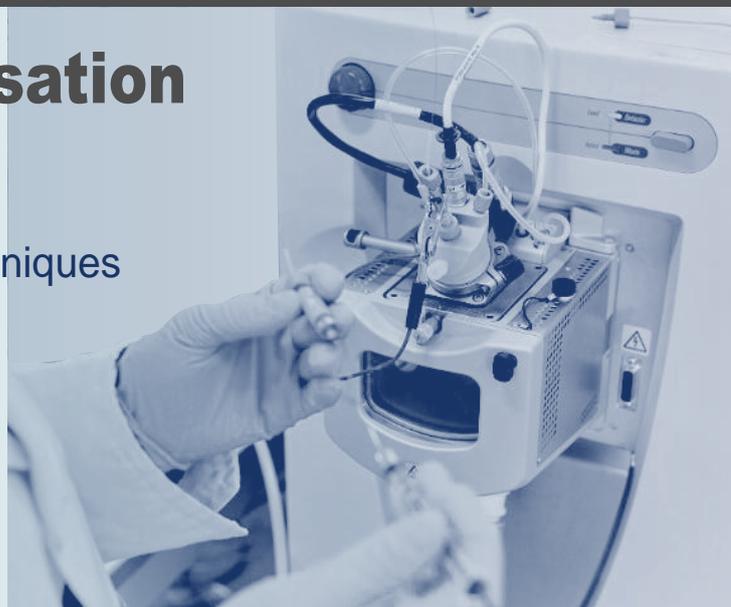
Hydrogen production

Photovoltaic devices

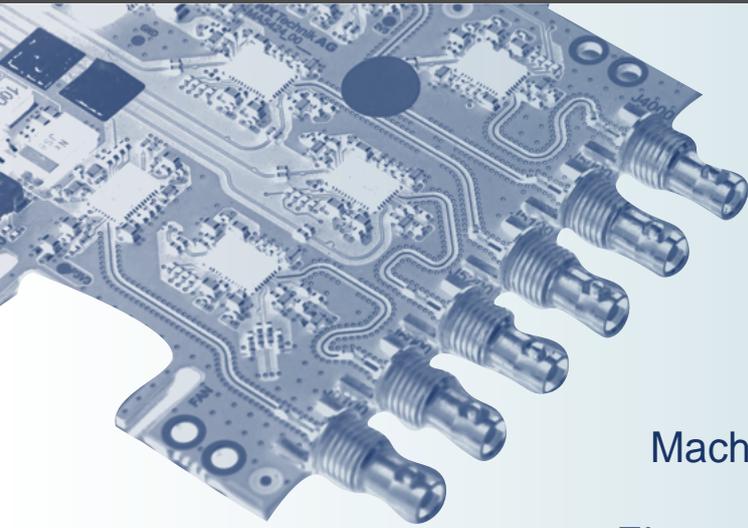


## Advanced Characterisation Techniques

- Data analysis and computational techniques
- In-situ and operando techniques
- Spectroscopy and spectrometry
- Structural analysis techniques



# Conference Themes:



## Towards Low Energy Technology

- Advanced heat sink materials
- Quantum computing development
- Machine learning and artificial intelligence
- Electrocaloric and magnetocaloric materials

## Sustainable Resource Use

- Advanced materials for waste water treatment
- Considering the green credentials of new materials
- Using Mātauranga Māori for sustainable resource use
- Persistent organic pollutants



## Science Outside of The Lab

- Interface between academia and industry
- Commercial drivers of a green transition based on advanced materials
- Challenges and opportunities for science commercialisation
- Science communication



**Conference Venue:**

# **TE PAE**

**Convention Centre**



# City Centre Map



## KEY

- Armagh St Entrance
- Oxford Terrace Main Entrance
- Cathedral Square Entrance
- Loading Entry
- Loading Exit
- Parking
- Retail & Hospitality

## ARTS & CULTURE

- Christchurch Town Hall
- The Piano
- Isaac Theatre Royal
- Tūrangā – Central Library
- Centre of Contemporary Art
- Christchurch Art Gallery Te Puna a Waiwhetū

## HOTELS

- Crowne Plaza
- Novotel
- Fable Christchurch Hotel
- Heritage Hotel
- Distinction Hotel
- Proposed Hotels
- Ibis
- BreakFree on Cashel
- Christchurch City Hotel
- Wyndham Garden Christchurch City

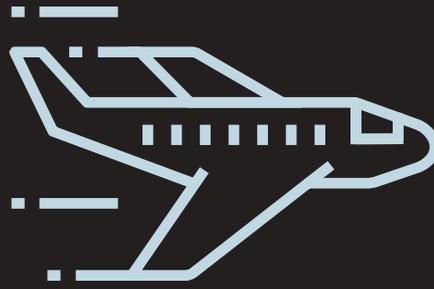
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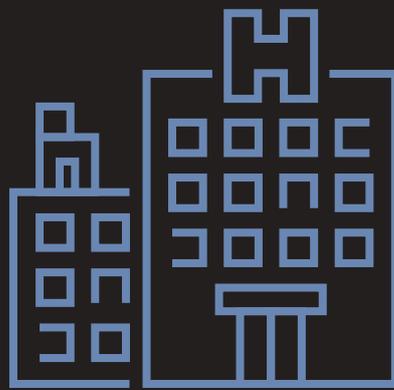
Minutes  
from

AUCKLAND



20 minute

Drive from Christchurch airport to the city



2500

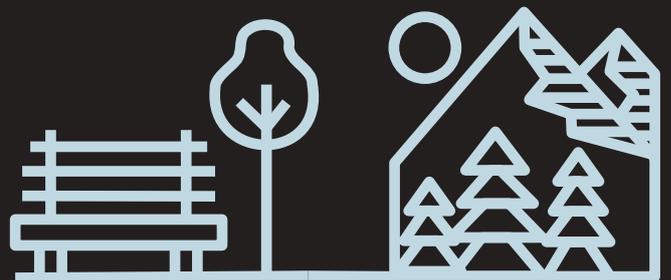
Hotel rooms within  
walking distance of  
the conference site

365

Walking, hiking, and  
mountain biking trails

700

Parks and  
gardens

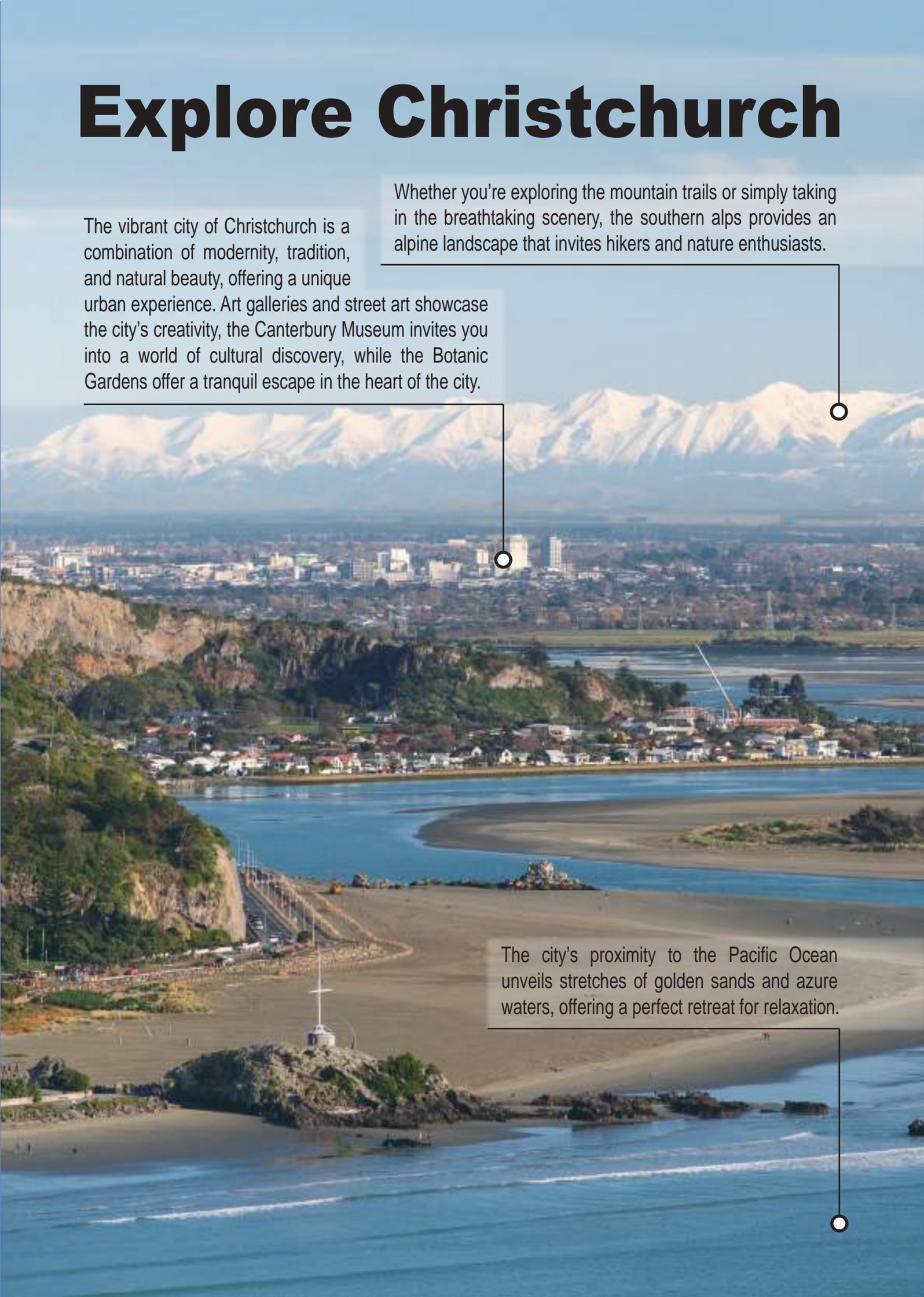


# Explore Christchurch

The vibrant city of Christchurch is a combination of modernity, tradition, and natural beauty, offering a unique urban experience. Art galleries and street art showcase the city's creativity, the Canterbury Museum invites you into a world of cultural discovery, while the Botanic Gardens offer a tranquil escape in the heart of the city.

Whether you're exploring the mountain trails or simply taking in the breathtaking scenery, the southern alps provides an alpine landscape that invites hikers and nature enthusiasts.

The city's proximity to the Pacific Ocean unveils stretches of golden sands and azure waters, offering a perfect retreat for relaxation.





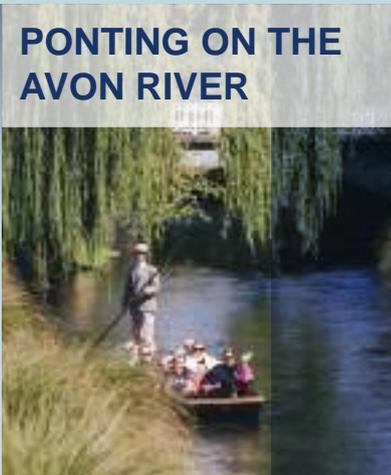
**THE TANNERY'S BOUTIQUE SHOPPING CENTRE**



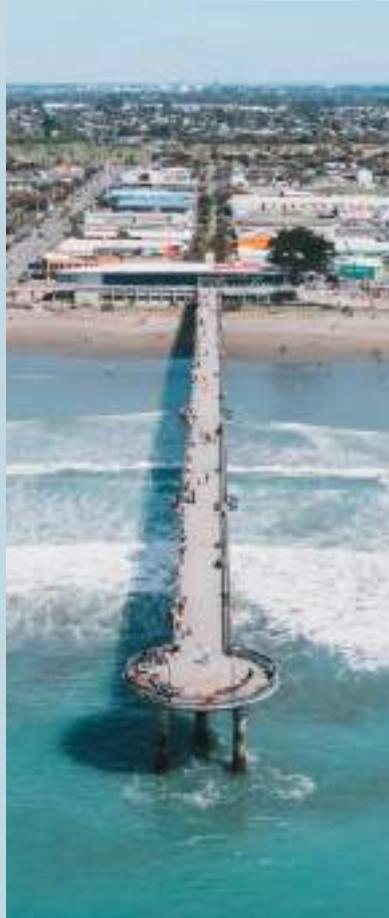
**DIAMOND HARBOUR**



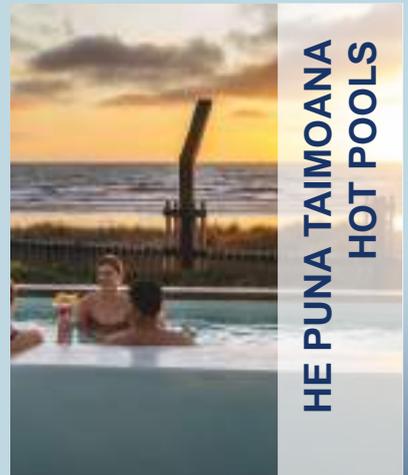
**DINING ON NEW REGENT STREET**



**PONTING ON THE AVON RIVER**



**NEW BRIGHTON PIER AND BEACH**



**HE PUNA TAIMOANA HOT POOLS**

## **Weather**

With average high temperatures ranging from 17 degrees Celcius to 23 degrees Celcius, summer in Christchurch is hot without being muggy. UV protection is recommended in the summer. There are many clear days, sunshine hours are high, and rain is not very common.

## **Find Out More**

Visit the Ōtautahi Christchurch website to discover the exciting attractions and activities, accomodation, dining, deals, and the amazing destinations that Christchurch has to offer:

**[CHRISTCHURCHNZ.COM](http://CHRISTCHURCHNZ.COM)**

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**For more information:**

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Chair AMN11

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