# Chapter 1

## Introduction

## 1.1 Host Institution Description

### 1.1.1 Brief History

Badan Riset dan Inovasi Teknologi (BRIN), is a cabinet-level government agency that was formed in 2019 by the Indonesian government. The formation of this agency was suggested by Megawati Soekarnoputri in January 2019 (Erwanti, 2019; detiknews, 2021), and was established as the sole national research agency on the 5th of May, 2021 by Joko Widodo (Rizky, 2021). Various national research agencies, namely Lembaga Ilmu Pengetahuan Indonesia (LIPI), Badan Pengkajian dan Penerapan Teknologi (BPPT), and Badan Tenaga Nuklir Nasional (BATAN) were subsumed into BRIN (Alfian et al., 2021).

#### 1.1.2 Organizational Structure

The subsumption of these three research agencies altered the organizational structure of BRIN. It was divided into two parts, namely the steering committee, and the executive, who oversees research and daily activities as directed by the steering committee (Teresia & Saleh, 2021). Figure 1.1 shows a more comprehensive visual representation of the organizational structure of BRIN (BRIN, 2022).

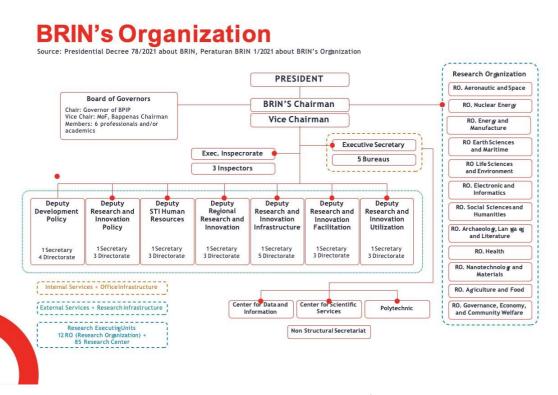


Figure 1.1 Organizational structure of BRIN

#### 1.1.3 Visions and missions

The vision of BRIN is to create a reliable, professional and to serve the President and the Vice President, as well as realizing the President's mission for an advanced independent and sovereign Indonesia based on mutual cooperation (BRIN, 2022). The missions of BRIN consist of providing technical assistance and administration as well as rapid, accurate and responsive analyses towards the President and the Vice President in the research and development and assessment and implementation of nuclear energy and space research. The second mission is to increase the quality of human resources and infrastructure for research and innovation in the implementation of nuclear energy and space. The last mission is to provide effective and efficient services in aspects such as supervision, general administration, information and institutional relations (BRIN, 2022).

### 1.2 Department Description

Pusat Riset Material Maju (PRMM) is a department of BRIN under the work unit Organisasi Riset Nanoteknologi dan Material (ORNM), carrying out its role as a technical implementer of research, development, study and application as well as inventions and innovations in the field of advanced materials. These are in accordance with Pasal 10 and Pasal 11 Peraturan BRIN No. 14 Tahun 2022 BRIN, 2023). The writer and his colleague, Alfa Aprilio Sengkey, were assigned to this department under the supervision of Dr. Nendar Herdianto, where the writer was tasked to write a systematic review on "Cytotoxicity test for Zn-Sr cosubstituted hydroxyapatite", while his colleague was tasked to write a systematic review on "Cytotoxicity test of hydroxyapatite-HPMC-Chitosan injectable bonegraft".