The exploration of sustainable development issues is still very open, especially at the regional level. These issues inspired Unmer Graduate Program in a sustainable manner to develop research and teaching. The conference is based on the belief that there are a large number of contemporary studies that are interdisciplinary and in the form of regional case studies in different countries. We need a range of inputs that will be the foundation for the specific study of environmental engineering, sustainable cities, and natural resource management.

The special themes we prepare are based on several issues in economics, and the field of architecture in order to explore the possibilities of interdisciplinary characters. Authors are invited to submit their papers with the following subthemes (but not limited to):

**Subthemes of Natural Sciences**
- Architecture for Sustainable Cities and Communities.
- Architecture for Resilient Infrastructure and Sustainable Industrialization.
- Architecture for Affordable and Clean Energy
- Environmental Engineering for Clean Water and Sanitation.

**Subthemes of Economic**
- Deceitful Work and Economic Growth for Economic Sustainability at Global Competition from Development of Tourism, Entrepreneurship, Small and Medium Enterprises;
- Industry innovation and infrastructure supported by Development of Accounting, Banking; Capital Market; Tourism Production and Consumption; Business Management; Marketing; HRM
- Innovation for Deceptive Work; SMEs Creative Industry;
- Entrepreneurship;
- Sustainability in Accounting;
- Corporate Governance & Corporate Social Responsibility.
IMPLEMENTATION OF “SANGA MANDALA” CONCEPT IN PATIRTAN WATUGEDE - SINGOSARI

Junianto
Department of Architecture, University of Merdeka Malang
Jl. Terusan Raya Dieng 62-64, Malang, Indonesia
Corresponding Author: junianto@unmer.ac.id

ABSTRACT
Patirtan Watugede is the royal heritage site of Singhasari, in the form of a bathing pool. Singhasari Kingdom is an ancient kingdom, centered in the region of Malang, which adheres to the Shiva-Buddhist belief. The concept of Sanga Mandala is a spatial orientation arrangement, derived from Shiva-Buddhist beliefs. In the Sanga Mandala concept, the cosmological orientation of space has a hierarchy based on its function. The concept of Sanga Mandala is a combination of North-South and East-West orientations. North is believed to be a high place, the main; South as a symbol of the sea, a low place, is bad. Orientation of the East is the main, while the West is bad. A study of spatial patterns at the Patirtan Watugede site was carried out descriptively which was ideographical. This study aims to describe the meaning of the Patirtan Watugede spatial layout, based on the Sanga Mandala concept. The meaning of spatial orientation, obtained by analyzing ancient map documents, field observations and historical information. As a result of the research findings, there is the concept of Sanga Mandala in the orientation of Patirtan Watugede. The holy water source area, as the most sacred place, is in the Northeast.

Keywords: baths, cosmology, sites

1. INTRODUCTION

The traditional concept, generally has a philosophy of harmony with nature. In planning and structuring buildings, traditional concepts are oriented towards environmental preservation. The concept of sanga-mandala is a spatial guide, a traditional concept, set in the Shiva-Buddhist belief. The application of the concept of sanga-mandala is still widely used in structuring buildings in Bali.

Patirtan Watugede, is an ancient bathing site, a legacy of the Singhasari kingdom which adheres to the Shiva-Buddhist belief. This Patirtan pond, initially functioned as a ritual of bathing, cleansing, for the royal family. There is a water source that flows through the Patirtan pond, which is in the northeastern part of the pond and in the southwest part of the pond. The choice of water in Patirtan Watugede, as holy water, is a proof of the high quality of water.

A high-quality water source on the Patirtan Watugede site is threatened with damage due to the current function of the bathing pool, too general. Functions as public baths, potentially uncontrolled, and will further damage historic sites, including the source of water. The physical building of the Patirtan pond is of high historical value, using brick materials. Constructively, this ancient building is also vulnerable to damage.