HYDROGELOVÉ ROBOTY

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Abstrakt: *Důraz na rozhraní člověk-robot vyvolává v robotice zájem o tzv. měkké roboty. Tyto roboty mají různé výhody, včetně jednoduché začlenitelnosti a bezpečnosti, které přispívají k bezproblémové interakci s lidmi. K posílení pokroku v této oblasti je zapotřebí vyhovujících materiálů. Hydrogely jsou slibné vyhovující materiály pro měkké roboty díky jejich vysoké roztažnosti, průhlednosti, iontové vodivosti a biokompatibilitě. Hydrogely dále poskytují inovativní schopnosti pro měkkou robotiku na základě jejich jedinečné reakce na podněty. V práci je pojednáváno o jedinečných vlastnostech měkkých robotů na bázi hydrogelu. Nakonec jsou navrženy pohledy na budoucí směry, které řeší potenciální výzvy v oblasti hydrogelové měkké robotiky.*

Klíčová slova: *Hydrogelové roboty Hydrogel Měkké roboty Měkká robotika Bezpečná robotika Budoucnost robotiky*

1 Úvod

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2 Problem Formulation (Equations)

Mathematical equations must be centered and numbered as follows: (1), (2),. . ., (99).

$$z^{EO} = \min_{e,\, g(\xi)} \mathbb{E}(F(\xi, e, g(\xi))), \tag{1}$$

$$a_{min} \leq a \leq a_{max}. \tag{2}$$

2.1 Subsection

When including a subsection you must use, for its heading, small letters, 10pt, left justified bold as here. Use the standard `equation` environment to typeset your equations, however, for multiline equations we recommend to use the `eqnarray` environment (LaTeX users).

Definition. Let H be a subgroup of a group G. A *left coset* of H in G is a subset of G that is of the form xH, where $x \in G$ and $xH = \{xh : h \in H\}$. Similarly a *right coset* of H in G is a subset of G that is of the form Hx, where $Hx = \{hx : h \in H\}$

Theorem. *This is a theorem content. Theorem text goes here.*

Proof. Let z be some element of $xH \cap yH$. Then $z = xa$ for some $a \in H$, and $z = yb$ for some $b \in H$. If h is any element of H then $ah \in H$ and $a^{-1}h \in H$, since H is a subgroup of G. However, $zh = x(ah)$ and $xh = z(a^{-1}h)$ for all $h \in H$. Therefore $zH \subset xH$ and $xH \subset zH$, and thus $xH = zH$. Similarly $yH = zH$, and thus $xH = yH$, as required. □

3 Problem Solution

Figures[1] and tables should be numbered as follows: Fig. 1, Fig. 2, ... etc. (see Fig. 1), Table 1, Table 2, ... etc. (see Table 1). Figure caption must be placed below the figure and table caption must be placed above the table. Some reference [**?**].

Figure 1: Please write your figure caption here

Table 1: Please write your table caption here

Parameter	Symbol	Value
Param no. 1	δ	0
Param no. 2	π	3.14

4 Conclusion

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